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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:33:38 ; Search time 34.4167 Seconds
(without alignments)
145.924 Million cell updates/sec

Title: US-09-603-832-5
Perfect score: 86
Sequence: 1 NDWEDRYRENMYR 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:.*
1: Geneseq1980s:.*
2: Geneseq1990s:.*
3: Geneseq2000s:.*
4: Geneseq2001s:.*
5: Geneseq2002s:.*
6: Geneseq2003ae:.*
7: Geneseq2003bs:.*
8: Geneseq2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	86	100.0	14	AAB66613	Aab66613 Mouse pri
2	86	100.0	15	ADD24281	Add24281 Murine pr
3	86	100.0	15	ABG80700	Abg80700 Prion pro
4	86	100.0	16	ADD24285	Add24285 Murine pr
5	86	100.0	16	ADI40727	Adi40727 Murine pr
6	86	100.0	26	ABG32259	Abg32259 Murine pr
7	86	100.0	26	ABG80699	Abg80699 Prion pro
8	86	100.0	26	ADD24284	Add24284 Murine pr
9	86	100.0	26	ADI40726	Adi40726 Murine pr
10	86	100.0	27	ADE06768	Ade06768 Mouse pri
11	86	100.0	33	AAB15057	Aab15057 Mouse pri
12	86	100.0	42	ADE06769	Ade06769 Mouse mpr
13	86	100.0	124	ABG94340	Abg94340 Mouse mpr
14	86	100.0	124	ABG80652	Abg80652 Mouse tru
15	86	100.0	124	ADD24200	Add24200 mPrPt-BK
16	86	100.0	208	AAB07316	Aab07316 Mouse pri
17	86	100.0	208	AAB07327	Aab07327 Mouse pri
18	86	100.0	208	ADJ66133	Adj66133 Mouse pri
19	86	100.0	211	AAB30801	Aab30801 Amino aci
20	86	100.0	225	ABR42793	Abr42793 Rat prion
21	86	100.0	226	ADB85240	Adb85240 Rat prion
22	86	100.0	254	AAR86714	Aar86714 Mouse pri
23	86	100.0	254	AAM69659	Aam69659 Mouse pri
24	86	100.0	254	AAM69659	Aam69659 Mouse pri
25	86	100.0	254	AAW85900	Aaw85900 Mouse pri
			254	AAV07996	Aay07996 Murine pr

26	86	100.0	254	4	AAB61772	Aab61772 Mouse pri
27	86	100.0	254	4	AAB82118	Aab82118 Murine pr
28	86	100.0	254	4	AAB82111	Aab82111 Murine pr
29	86	100.0	254	4	AAB84522	Aab84522 Amino aci
30	86	100.0	254	4	AAG65852	Aag65852 Mouse pri
31	86	100.0	254	5	AAM50888	Aam50888 Mouse pri
32	86	100.0	254	5	ABP51786	Abp51786 Mouse pri
33	86	100.0	254	5	ABG31906	Abg31906 Mouse pri
34	86	100.0	254	5	ABB04427	Abb04427 Murine pr
35	86	100.0	254	5	AAE15602	Aae15602 Mouse PrP
36	86	100.0	254	5	AAE15609	Aae15609 Mouse PrP
37	86	100.0	254	5	ABU58867	Abu58867 Mouse PrP
38	86	100.0	254	6	AAE33226	Aae33226 Mouse PrP
39	86	100.0	254	6	ABR42792	Abr42792 Mouse pri
40	86	100.0	254	7	ADC59531	Adc59531 Mouse pri
41	86	100.0	254	7	ADC52088	Adc52088 Mouse pri
42	86	100.0	254	7	ADD24194	Add24194 Mouse pri
43	86	100.0	254	7	ADE56264	Ade56264 Rat Prote
44	86	100.0	254	7	ADE06739	Ade06739 Mouse pri
45	86	100.0	254	7	ADE06740	Ade06740 Mouse pri

ALIGNMENTS

RESULT 1
AAB66613
ID AAB66613 standard; peptide; 14 AA.

XX AC AAB66613;
XX DT 05-APR-2001 (first-entry)
XX DE Mouse prion helix 1.
XX KW Coiled-coil; prion; helix.
XX OS Mus sp.
XX PN W0200100010-A1.
XX PD 04-JAN-2001.
XX PF 23-JUN-2000; 2000WO-CA000736.
XX PR 25-JUN-1999; 99US-0141203P.
XX PA (KOND/) KONDEJEWSKI L H.
XX PA (IRVI/) IRVIN R T.
XX PA (HODG/) HODGES R S.
XX FI Kondejewski LH, Irvin RT, Hodges RS;
XX DR WPI; 2001-137855/14.
XX CC Coiled-coil polypeptide compositions useful for generating antibodies
PT against a specific epitope, comprises a specific epitope from alpha-
PT helical surface region of a protein inserted into coiled-coil polypeptide
PT template.
XX PS Disclosure; Fig 4; 25pp; English.
XX CC The present invention relates to a coiled-coil polypeptide with a selected
CC epitope from solvent accessible region of a protein inserted into a
CC coiled-coil polypeptide template. The coiled-coil polypeptides are useful
CC for generating antibodies specific to a selected epitope from a selected
CC protein and also for identifying ligands that selectively bind the alpha-
CC helical segment contained in the native protein. The conformation-
CC specific antibodies are useful as therapeutic and diagnostic ligands
XX SQ Sequence 14 AA;
Query Match 100.0%; Score 86; DB 4; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.6e-06;
Matches 14, Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 1 NDWEDRYRENMYR 14

RESULT 2

ID ADD24281 standard; peptide; 15 AA.
XX AC ADD24281;
XX 15-JAN-2004 (first entry)
XX Murine prion protein PrP peptide prpshort.
XX vaccine composition; virus-like particle; core particle;
KW first attachment site; antigen; antigenic determinant; prion protein;
KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
KW prion disease; Bovine Spongiform Encephalopathy; BSE;
KW Creutzfeldt-Jakob Disease; prion.
XX OS prion.
XX WO2003059386-A2.
XX 24-JUL-2003.
XX 17-JAN-2003; 2003WO-EP000460.
XX 18-JAN-2002; 2002US-00050902.
XX 21-JAN-2002; 2002WO-1B000166.
XX 08-JUL-2002; 2002US-0393725P.
XX 18-JUL-2002; 2002US-0396590P.
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;
PI WPI; 2003-598483/56.
XX A vaccine composition for preventing or treating prion diseases (e.g.
PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
PT phage) and at least one prion protein or peptide bound to the virus-like
PT particle.
XX Example 7; Page 102; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-
CC like or a core particle with at least one first attachment site and at
CC least one antigen or antigenic determinant that is a prion protein (PrP)
CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
CC being bound to the virus-like or core particle. The vaccine of the
CC invention may have neuroprotective or antiinflammatory activity. The
CC composition is useful as a medicament or in manufacturing a medicament
CC for the treatment or prevention of prion diseases. The prion diseases may
CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
CC Disease. The present sequence is that of a peptide fragment of a prion
CC protein which may be used for the production of the vaccine of the
CC invention.
XX SQ Sequence 15 AA;
Query Match 100.0%; Score 86; DB 7; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e-06;
Matches 14, Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 2 NDWEDRYRENMYR 15

RESULT 3

ID ABG80700 standard; protein; 16 AA.
XX AC ABG80700;
XX 29-NOV-2002 (first entry)
XX Prion protein peptide cprpshort.
XX Molecular antigen array; vaccine; antigen; antimicrobial;
KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;
KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
KW adult respiratory distress syndrome; ARDS; Crohn's disease;
KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
KW Grave's disease; systemic lupus erythematosus; osteoporosis;
KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
KW enterokinase; cysteine-containing linker.
XX OS Unidentified.
XX WO200256907-A2.
XX 25-JUL-2002.
XX 21-JAN-2002; 2002WO-1B000168.
XX 19-JAN-2001; 2001US-0262379P.
XX 04-MAY-2001; 2001US-0288549P.
XX 05-OCT-2001; 2001US-0326998P.
XX 07-NOV-2001; 2001US-0331045P.
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX (NOVS) NOVARTIS PHARMA AG.
XX (MAUR) MAURER P.
XX (LECH) LECHNER F.
XX (ORTM) ORTMANN R.
XX (LUEO) LUEOEND R.
XX (STAU) STAUFENBIEL M.
XX (FREY) FREY P.
XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;
PI Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;
XX WPI; 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX Example 8; Page 120; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
CC molecular scaffold comprising: (i) a core particle selected from: (1) a
CC core particle of a non-natural origin; and (2) a core particle of natural
CC origin; and (ii) an organiser comprising at least one first attachment
CC site, where the organiser is connected to the core particle by at least
CC one covalent bond; (b) an antigen or antigenic determinant with at least
CC one second attachment site, where the antigen or antigenic determinant is
CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
CC attachment site is selected from: (i) an attachment site not naturally
CC occurring with the antigen or antigenic determinant; and (ii) an
CC attachment site naturally occurring with the antigen or antigenic
CC determinant, where the second attachment site is capable of association
CC through at least one non-peptide bond to the first attachment site; and
CC where the antigen or antigenic determinant and the scaffold interact
CC through the association to form an ordered and repetitive antigen array.
CC Also included is a process for producing a non-naturally occurring
CC ordered and repetitive antigen array. The composition is used in
CC immunisation and as a vaccine for diseases such as influenza, graft

CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy.
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is an antigen
 CC for use in the array of the invention. The antigen is modified to possess
 CC a cleavage site (enterokinase or factor Xa) and a Cysteine- containing N-
 CC or C-terminal linker peptide which serves as the attachment point to a
 CC virus like particle or bacterial protein (the scaffold protein)
 XX
 SQ Sequence 16 AA;

Query Match 100.0%; Score 86; DB 5; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.9e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
 |||||
 DB 3 NDWEDRYRENMYR 16

RESULT 4
 ADD24285
 ID ADD24285 standard; peptide; 16 AA.

AC ADD24285;

DT 15-JAN-2004 (first entry)

DE Murine prion protein PrP peptide cprshort.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion.

XX Synthetic.

OS prion.

PN WO2003059386-A2.

XX 24-JUL-2003.

PF 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-00050902.

PR 21-JAN-2002; 2002WO-IB000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;

XX WPI; 2003-598483/56.

PT A vaccine composition for preventing or treating prion diseases (e.g.

PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

PT phage) and at least one prion protein or peptide bound to the virus-like

PT particle.

PS Example 14; Page 109; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-

CC like or a core particle with at least one first attachment site and at

CC least one antigen or antigenic determinant that is a prion protein (PrP)

CC or its dimer, or a PrP peptide, the antigen or antigenic determinant

CC being bound to the virus-like or core particle. The vaccine of the

CC invention may have neuroprotective or antiinflammatory activity. The

CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is that of a peptide fragment of a prion
 CC protein which may be used for the production of the vaccine of the
 CC invention.

XX Sequence 16 AA;

Query Match 100.0%; Score 86; DB 7; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.9e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
 |||||
 DB 3 NDWEDRYRENMYR 16

RESULT 5

ADI40727
 ID ADI40727 standard; peptide; 16 AA.

XX AC ADI40727;

XX 22-APR-2004 (first entry)

XX Murine prion protein peptide cprshort SEQ ID NO:18.

XX virus-like particle; bacteriophage AP205; coat protein; cytostatic;
 KW vaccine; gene therapy; cancer; allergy; asthma; prion protein.

XX Mus musculus.

OS Synthetic.

XX WO2004007538-A2.

XX 22-JAN-2004.

XX 14-JUL-2003; 2003WO-EP007572.

XX 17-JUL-2002; 2002US-0396126P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann MF, Tissot A, Pumpens P, Cielens I, Renhofs R;

XX WPI; 2004-122882/12.

PT New virus-like particle, useful for preparing a composition for treating

PT or preventing a disease e.g., cancer, allergy or asthma.

PS Disclosure; SEQ ID NO 18; 170pp; English.

XX The present invention describes a virus-like particle (I) which
 CC comprises: (a) a protein having the 131-amino acid sequence of
 CC bacteriophage AP205 coat protein or the mutant coat protein, see ADI40710
 CC or ADI40712 respectively, or (b) a mutagen of the protein of (a). Also
 CC described: (1) a mutagen of the recombinant protein having the 131-amino
 CC acid sequence; (2) a vector for producing a AP205 virus like particle
 CC comprising a nucleotide sequence being at least 80, 90, 95 or 99%

CC identical to that of the sequence comprising 3635 or 3613 bp or producing

CC a recombinant protein comprising a nucleotide sequence encoding a

CC polypeptide fused to a protein; (3) a pharmaceutical composition

CC comprising the composition and a carrier; (4) a process for producing a

CC method of treating or preventing a disease, disorder or physiologic

CC conditions in an individual; (6) a nucleic acid molecule comprising 3635-

CC bp sequence; (7) a host cell containing a nucleic acid or a vector; and

CC (8) a method of producing the virus-like particle. (I) has cytostatic

CC activity, and can be used in vaccines, and in gene therapy. The virus-

CC like particle is useful for preparing a composition for treating or

CC preventing a disease e.g., cancer, allergy or asthma. The present or

CC sequence represents a prion protein peptide, which is used in the

CC exemplification of the present invention.

XX Sequence 16 AA;
SQ Query Match 100.0%; Score 86; DB 8; Length 16;
Best Local Similarity 100.0%; Pred. NO. 1.9e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NDWEDRYRENMYR 14
| | | | | | | | | | | | | | | |
Db 3 NDWEDRYRENMYR 16

RESULT 6

ABG32299

ID ABG32299 standard; peptide; 26 AA.

XX ABG32299;

AC ABG32299;

DT 10-DEC-2002 (first entry)

DE Murine prion protein (PrP) cprpshort peptide.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;

KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;

KW vaccine; infectious disease; prion.

XX Mus sp.

OS WO200256905-A2.

XX 25-JUL-2002.

PN 21-JAN-2002; 2002WO-IB000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;

XX Piossek C;

PI WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious

PT diseases.

XX Example 8; Page 120; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array

CC used in the production of vaccines for infectious diseases. The invention

CC also discloses a composition comprising a non-natural molecular scaffold

CC comprising a core particle selected from a core particle of a non-natural

CC origin and a core particle of natural origin and an organiser comprising

CC at least one first attachment site, where the organiser is connected to

CC the core particle by at least one covalent bond. Also disclosed is an

CC antigen or antigenic determinant with at least one second attachment

CC site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is

CC selected from an attachment site not naturally occurring with the antigen

CC or antigenic determinant and an attachment site naturally occurring with

CC the antigen or antigenic determinant, where the second attachment site is

CC capable of association through at least one non-peptide bond to the first

CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in

CC immunization and as a vaccine. The present sequence represents a peptide

CC sequence used to create the compositions of the invention

XX SQ Sequence 26 AA;
Query Match 100.0%; Score 86; DB 5; Length 26;
Best Local Similarity 100.0%; Pred. NO. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14

| | | | | | | | | | | | | | | |

Db 13 NDWEDRYRENMYR 26

RESULT 7

ABG80699

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

AC ABG80699;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprplong.

XX Molecular antigen array; vaccine; antigen; antimicrobial;

KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;

KW graft versus host disease; IGS-mediated allergic reaction; anaphylaxis;

KW adult respiratory distress syndrome; ARDS; Crohn's disease;

KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

KW Grave's disease; systemic lupus erythematosus; osteoporosis;

KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;

KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;

KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;

KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;

KW enterokinase; cysteine-containing linker.

XX Unidentified.

OS WO200256907-A2.

XX 25-JUL-2002.

PN 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

PA (MAUR) MAURER P.

PA (LECH) LECHNER F.

PA (ORTM) ORTMANN R.

PA (LUEC) LUECOEND R.

PA (STAUF) STAUFENBIEL M.

PA (FREY) FREY P.

XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

XX Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

XX WPI; 2002-636514/68.

CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in

CC immunization and as a vaccine. The present sequence represents a peptide

CC sequence used to create the compositions of the invention

XX SQ Sequence 26 AA;
Query Match 100.0%; Score 86; DB 5; Length 26;
Best Local Similarity 100.0%; Pred. NO. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14

| | | | | | | | | | | | | | | |

Db 13 NDWEDRYRENMYR 26

RESULT 7

ABG80699

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

AC ABG80699;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprplong.

XX Molecular antigen array; vaccine; antigen; antimicrobial;

KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;

KW graft versus host disease; IGS-mediated allergic reaction; anaphylaxis;

KW adult respiratory distress syndrome; ARDS; Crohn's disease;

KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

KW Grave's disease; systemic lupus erythematosus; osteoporosis;

KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;

KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;

KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;

KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;

KW enterokinase; cysteine-containing linker.

XX Unidentified.

OS WO200256907-A2.

XX 25-JUL-2002.

PN 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

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XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

XX Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

XX WPI; 2002-636514/68.

CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in

CC immunization and as a vaccine. The present sequence represents a peptide

CC sequence used to create the compositions of the invention

XX SQ Sequence 26 AA;
Query Match 100.0%; Score 86; DB 5; Length 26;
Best Local Similarity 100.0%; Pred. NO. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14

| | | | | | | | | | | | | | | |

Db 13 NDWEDRYRENMYR 26

RESULT 7

ABG80699

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

AC ABG80699;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprplong.

XX Molecular antigen array; vaccine; antigen; antimicrobial;

KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;

KW graft versus host disease; IGS-mediated allergic reaction; anaphylaxis;

KW adult respiratory distress syndrome; ARDS; Crohn's disease;

KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

KW Grave's disease; systemic lupus erythematosus; osteoporosis;

KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;

KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;

KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;

KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;

KW enterokinase; cysteine-containing linker.

XX Unidentified.

OS WO200256907-A2.

XX 25-JUL-2002.

PN 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

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PA (MAUR) MAURER P.

PA (LECH) LECHNER F.

PA (ORTM) ORTMANN R.

PA (LUEC) LUECOEND R.

PA (STAUF) STAUFENBIEL M.

PA (FREY) FREY P.

XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

XX Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

XX WPI; 2002-636514/68.

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XX SQ Sequence 26 AA;
Query Match 100.0%; Score 86; DB 5; Length 26;
Best Local Similarity 100.0%; Pred. NO. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14

| | | | | | | | | | | | | | | |

Db 13 NDWEDRYRENMYR 26

RESULT 7

ABG80699

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

AC ABG80699;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprplong.

XX Molecular antigen array; vaccine; antigen; antimicrobial;

KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;

KW graft versus host disease; IGS-mediated allergic reaction; anaphylaxis;

KW adult respiratory distress syndrome; ARDS; Crohn's disease;

KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

KW Grave's disease; systemic lupus erythematosus; osteoporosis;

KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;

KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;

KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;

KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;

KW enterokinase; cysteine-containing linker.

XX Unidentified.

OS WO200256907-A2.

XX 25-JUL-2002.

PN 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

PA (MAUR) MAURER P.

PA (LECH) LECHNER F.

PA (ORTM) ORTMANN R.

PA (LUEC) LUECOEND R.

PA (STAUF) STAUFENBIEL M.

PA (FREY) FREY P.

XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

XX Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

XX WPI; 2002-636514/68.

CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in

CC immunization and as a vaccine. The present sequence represents a peptide

CC sequence used to create the compositions of the invention

XX SQ Sequence 26 AA;
Query Match 100.0%; Score 86; DB 5; Length 26;
Best Local Similarity 100.0%; Pred. NO. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14

| | | | | | | | | | | | | | | |

Db 13 NDWEDRYRENMYR 26

RESULT 7

ABG80699

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

AC ABG80699;

CC site, where the organism is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (A β 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is an antigen
 CC for use in the array of the invention. The antigen is modified to possess
 CC a cleavage site (enterokinase or factor Xa) and a cysteine- containing N-
 CC or C-terminal linker peptide which serves as the attachment point to a
 CC virus like particle or bacterial protein (the scaffold protein)

XX SQ Sequence 26 AA;

Query Match 100.0%; Score 86; DB 5; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.1e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDWEDRYRENMYR 14
 DB 13 NDWEDRYRENMYR 26
 |||||

RESULT 8
 ADD24284
 ID ADD24284 standard; peptide; 26 AA.
 AC ADD24284;
 DT 15-JAN-2004 (first entry)

DE Murine prion protein PrP peptide cprlong.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion.

XX Synthetic.
 OS Prion.

XX WO2003059386-A2.

XX 24-JUL-2003.

XX 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-00050902.

XX 21-JAN-2002; 2002WO-IB000166.

XX 08-JUL-2002; 2002US-0393725P.

XX 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;

XX WPI; 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX Example 14; Page 109; 246pp; English.
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is that of a peptide fragment of a prion
 CC protein, which may be used for the production of the vaccine of the
 CC invention.

XX SQ Sequence 26 AA;

Query Match 100.0%; Score 86; DB 7; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.1e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NDWEDRYRENMYR 14
 DB 13 NDWEDRYRENMYR 26
 |||||

RESULT 9
 ADI40726
 ID ADI40726 standard; peptide; 26 AA.
 AC ADI40726;
 DT 22-APR-2004 (first entry)

DE Murine prion protein peptide cprlong SEQ ID NO:17.

XX virus-like particle; bacteriophage AP205; coat protein; cytostatic;
 KW vaccine; Gene therapy; cancer; allergy; asthma; prion protein.

XX Mus musculus.
 OS Synthetic.

XX WO2004007538-A2.

XX 22-JAN-2004.

XX 14-JUL-2003; 2003WO-EP007572.

XX 17-JUL-2002; 2002US-0396126P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann WP, Tissot A, Pumpens P, Cielens I, Renhofa R;

XX WPI; 2004-122882/12.

XX New virus-like particle, useful for preparing a composition for treating
 PT or preventing a disease e.g., cancer, allergy or asthma.

XX Disclosure; SEQ ID NO 17; 170pp; English.

XX The present invention describes a virus-like particle (I) which
 CC comprises: (a) a protein having the 131-amino acid sequence of
 CC bacteriophage AP205 coat protein or the mutant coat protein, see ADI40710
 CC or ADI40712 respectively; or (b) a mutein of the protein of (a). Also
 CC described: (1) a mutein of the recombinant protein having the 131-amino
 CC acid sequence; (2) a vector for producing a AP205 virus like particle

comprising a nucleotide sequence being at least 80, 90, 95 or 99% identical to that of the sequence comprising 3635 or 3613 bp or producing a recombinant protein comprising a nucleotide sequence encoding a polypeptide fused to a protein; (3) a pharmaceutical composition comprising the composition and a carrier; (4) a process for producing a non-naturally occurring, ordered and repetitive antigen array; (5) a method of treating or preventing a disease, disorder or physiologic conditions in an individual; (6) a nucleic acid molecule comprising 3635-bp sequence; (7) a host cell containing a nucleic acid or a vector; and (8) a method of producing the virus-like particle. (I) has cytostatic activity, and can be used in vaccines, and in gene therapy. The virus-like particle is useful for preparing a composition for treating or preventing a disease e.g., cancer, allergy or asthma. The present sequence represents a prion protein peptide, which is used in the exemplification of the present invention.

XX Sequence 26 AA;

Query Match 100.0%; Score 86; DB 8; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.1e-06;
 Matches 14, Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
 |||||
 DB 13 NDWEDRYRENMYR 26

RESULT 10
 ADE06768
 ID ADS06768 standard; peptide; 27 AA.
 AC ADE06768;
 DT 29-JAN-2004 (first entry)
 DE Mouse prion protein related peptide.
 XX hybrid polypeptide; protein aggregation; prion polypeptide;
 KW neuroprotective; nootropic; antidiabetic; anticonvulsant;
 KW cerebrotective; antiparkinsonian; cytostatic; neurotropic; cardiant;
 KW antiinflammatory; antiarteriosclerotic; gene therapy;
 KW Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 KW Alzheimer's disease; Type II diabetes; Huntington's disease;
 KW immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 KW amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 KW Frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 KW familial amyloidotic polyneuropathy; medullary carcinoma;
 KW chronic renal failure; congestive heart failure; chronic inflammation;
 KW atherosclerosis.
 XX
 OS Synthetic.
 OS Mus musculus.
 XX
 PN WO2003085086-A2.
 XX
 PD 16-OCT-2003.
 XX
 PT 08-APR-2003; 2003WO-US010856.
 XX
 PR 09-APR-2002; 2002US-0371610P.
 XX
 PA (SRI) SRIIPPS RES INST.
 XX
 PI Burton DR, Williamson RA, Moroncini G;
 XX
 DR WPI; 2003-877028/81.
 XX
 XX New motif-grafted hybrid polypeptides binding to the infectious form of a prion, useful for diagnosing or treating diseases of protein aggregation or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or diabetes.
 XX
 PS Example 2; Fig 1A; 115pp; English.

XX The present invention describes a hybrid polypeptide (I) comprising: (a) a polypeptide motif containing a sufficient number of contiguous amino acid residues from a polypeptide associated with a disease of protein aggregation or conformation to bind an aggregating form of the polypeptide or to a disease-associate conformer of the polypeptide; and (b) an additional amino acids from a polypeptide other than the polypeptide from which the motif is derived, where the resulting hybrid polypeptide binds with greater affinity to a disease causing or infectious conformer of the polypeptide than is the source of the polypeptide motif compared to a benign form of the polypeptide. Also described: (1) a nucleic acid molecule encoding (I); (2) a vector comprising the nucleic acid molecule; (3) a cell comprising the vector; (4) detecting an isoform or a prpsc form of a prion polypeptide or a polypeptide associated with a disease of protein aggregation, in a sample above; (5) a solid support comprising a plurality of polypeptides described with a disease of protein aggregation; (7) preparing a hybrid molecule that specifically interacts with one conformer of a protein involved in the disease mentioned above; and (8) an anti-idiotypic antibody that specifically binds to an infectious form of a prion protein. (I) has neuroprotective, nootropic, antidiabetic, anticonvulsant, cerebrotective, antiparkinsonian, cytostatic, neurotropic, cardiant, antiinflammatory and antiarteriosclerotic activities, and can be used in gene therapy. The composition and methods of the present invention can be used in diagnosing or treating diseases of protein aggregation or conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine spongiform encephalopathy, Alzheimer's disease, Type II diabetes, Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis associated with chronic inflammatory disease, hereditary systemic amyloidosis associated with autosomal dominant inheritance of variant transthyretin gene, amyotrophic lateral sclerosis, Pick's disease, Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma of thyroid, chronic renal failure, congestive heart failure, senile cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis or familial amyloidosis. The present sequence is used in the exemplification of the present invention.

XX Sequence 27 AA;

Query Match 100.0%; Score 86; DB 7; Length 27;
 Best Local Similarity 100.0%; Pred. No. 3.2e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
 |||||
 DB 10 NDWEDRYRENMYR 23

RESULT 11
 AAB15057
 ID AAB15057 standard; peptide; 33 AA.
 XX
 AC AAB15057;
 XX
 DT 18-DEC-2000 (first entry)
 XX
 DE Mouse prion protein peptide homologous to ovine sequence 145-177.
 XX
 KW Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;
 KW transmissible spongiform encephalopathy; antibody;
 KW bovine spongiform encephalopathy; sheep; cattle; human.
 XX
 OS Mus sp.
 XX
 PN WO200048003-A1.
 XX
 PD 17-AUG-2000.
 XX
 PF 09-FEB-2000; 2000WO-NL000079.
 XX
 PR 11-FEB-1999; 99EP-00200391.

XX PA (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK.

XX PI Garsen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM;

XX PI Schreuder BEC, Bossers A;

XX DR WPI; 2000-506099/45.

XX PT Use of guanidine thiocyanate for reducing risk of false-positive results

XX PT in testing mammalian sample for aberrant prion protein, useful for

XX PT detection of transmissible spongiform encephalopathies.

XX PS Disclosure; Fig 2; 49pp; English.

XX CC The present invention relates to a method for reducing the risk of

XX CC scoring a false positive test result in testing a sample for aberrant

XX CC prion protein. The method involves the use of guanidine thiocyanate

XX CC (gdnSCN) or its functional equivalent. This test is highly useful for

XX CC testing for transmissible spongiform encephalopathies (TSEs) such as BSE

XX CC (bovine spongiform encephalopathy). The method allows a faster, simpler

XX CC and more reliable method for monitoring cattle and sheep for the presence

XX CC of aberrant prion protein before it reaches the human and animal food

XX CC chain. In the invention antipeptide antibodies were raised against sheep

XX CC prion protein peptides. The present sequence is the mouse prion protein

XX CC sequence homologous to the sheep peptide indicated

XX SQ Sequence 33 AA;

Query Match 100.0%; Score 86; DB 3; Length 33;

Best Local Similarity 100.0%; Pred. No. 4e-06;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NWEDRYRYENMYR 14

DB 2 NWEDRYRYENMYR 15

RESULT 12

AB06769

ID ADE06769 standard; peptide; 42 AA.

AC ADE06769;

XX 29-JAN-2004 (first entry)

DE Mouse prion protein related peptide.

XX hybrid polypeptide; protein aggregation; prion polypeptide;

KW neuroprotective; nontropic; antidiabetic; anticonvulsant;

KW cerebroprotective; antiparkinsonian; cytoskeletal; nephrotropic; cardiant;

KW antiinflammatory; antiarteriosclerotic; gene therapy;

KW Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;

KW Alzheimer's disease; Type II diabetes; Huntington's disease;

KW immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;

KW amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;

KW frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;

KW familial amyloidotic polyneuropathy; medullary carcinoma;

KW chronic renal failure; congestive heart failure; chronic inflammation;

KW atherosclerosis.

OS Synthetic.

OS Mus musculus.

XX WO2003085086-A2.

XX 16-OCT-2003.

XX 08-APR-2003; 2003WO-US010856.

XX 09-APR-2002; 2002US-0371610P.

XX (SRI) SCRIPPS RES INST.

XX PA

Burton DR, Williamson RA, Moroncini G;

WPI; 2003-877028/81.

New motif-grafted hybrid polypeptides binding to the infectious form of a prion, useful for diagnosing or treating diseases of protein aggregation or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or diabetes.

Example 2; Fig 1A; 115pp; English.

The present invention describes a hybrid polypeptide (I) comprising: (a) a polypeptide motif containing a sufficient number of contiguous amino acid residues from a polypeptide associated with a disease of protein aggregation or conformation to bind an aggregating form of the polypeptide; and (b) an additional amino acids from a polypeptide other than the polypeptide from which the motif is derived, where the resulting hybrid polypeptide binds with greater affinity to a disease causing or infectious conformer of the polypeptide than is the source of the polypeptide motif compared to a benign form of the polypeptide. Also described: (1) a nucleic acid molecule encoding (1); (2) a vector comprising the nucleic acid molecule; (3) a cell comprising the vector; (4) detecting an isoform or a PrPsc form of a prion polypeptide or a polypeptide associated with a disease of protein aggregation in a sample; (5) a solid support comprising a plurality of polypeptides described above; (6) detecting cells that contain (1) protein conformer associated with a disease of protein aggregation; (7) preparing a hybrid molecule that specifically interacts with one conformer of a protein involved in the disease mentioned above; and (8) an anti-idiotypic antibody that specifically binds to an infectious form of a prion protein. (I) has neuroprotective, nontropic, antidiabetic, anticonvulsant, cerebroprotective, antiparkinsonian, cytoskeletal, nephrotropic, cardiant, antiinflammatory and antiarteriosclerotic activities, and can be used in gene therapy. The composition and methods of the present invention can be used in diagnosing or treating diseases of protein aggregation or conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine spongiform encephalopathy, Alzheimer's disease, Type II diabetes, Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis associated with chronic inflammatory disease, hereditary systemic amyloidosis associated with autosomal dominant inheritance of variant transthyretin gene, amyotrophic lateral sclerosis, Pick's disease, Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma of thyroid, chronic renal failure, congestive heart failure, senile cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis or familial amyloidosis. The present sequence is used in the exemplification of the present invention.

Sequence 42 AA;

Query Match 100.0%; Score 86; DB 7; Length 42;

Best Local Similarity 100.0%; Pred. No. 5.1e-06;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NWEDRYRYENMYR 14

DB 25 NWEDRYRYENMYR 39

RESULT 13

ABG94340

ID ABG94340 standard; protein; 124 AA.

XX AC ABG94340;

XX 10-DEC-2002 (first entry)

XX Mouse mPrP protein.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;

KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;

KW vaccine; infectious disease.

OS Mus sp.
 PN WO200256905-A2.
 XX 25-JUL-2002.
 XX 21-JAN-2002; 2002WO-IB000166.
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Piossek C;
 XX WPI; 2002-627351/67.
 DR Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX Disclosure; Page 438; 44pp; English.
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 86; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.6e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NDWEDRYRENMYR 14
 DB 23 NDWEDRYRENMYR 36
 RESULT 14
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;

KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutein;
 KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimers disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX Mus sp.
 OS Synthetic.
 OS WO200256907-A2.
 PN 25-JUL-2002.
 XX 21-JAN-2002; 2002WO-IB000168.
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUEB/) LUEBEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX Maurer P, Lechner F, Ortmann R, Luebend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;
 PI WPI; 2002-636514/68.
 DR Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX Example 7; Page 415; 418pp; English.
 PS The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy.
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimers disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment

CC point to a virus like particle or bacterial protein (the scaffold
CC protein)
XX
SQ Sequence 124 AA;

Query Match 100.0%; Score 86; DB 5; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 23 NDWEDRYRENMYR 36

RESULT 15
ADD24200
ID ADD24200 standard; protein; 124 AA.
XX
AC ADD24200;

XX
DT 15-JAN-2004 (first entry)
XX
DE mPrPt-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;
XX first attachment site; antigen; antigenic determinant; prion protein;
XX PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
XX prion disease; Bovine Spongiform Encephalopathy; BSE;
XX Creutzfeldt-Jakob disease; prion; mPrPt-EK-Fc*.

XX Unidentified.
OS Prion.

XX
XX WO2003059386-A2.

XX
XX 24-JUL-2003.

XX
XX 17-JAN-2003; 2003WO-EF000460.

XX
XX 18-JAN-2002; 2002US-00050902.

XX
XX 21-JAN-2002; 2002WO-1B000166.

XX
XX 08-JUL-2002; 2002US-0393725P.

XX
XX 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;

XX WPI; 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.

XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

XX phage) and at least one prion protein or peptide bound to the virus-like

XX particle.

XX Example 13; SEQ ID NO 93; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-
XX like or a core particle with at least one first attachment site and at
XX least one antigen or antigenic determinant that is a prion protein (PrP)
XX or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX being bound to the virus-like or core particle. The vaccine of the
XX invention may have neuroprotective or antiinflammatory activity. The
XX composition is useful as a medicament or in manufacturing a medicament
XX for the treatment or prevention of prion diseases. The prion diseases may
XX include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX Disease. The present sequence is the amino acid sequence of the cleaved
XX protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
XX which was used during the exemplification of the invention.

XX Sequence 124 AA;

Query Match 100.0%; Score 86; DB 7; Length 124;

Best Local Similarity 100.0%; Pred. No. 1.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 23 NDWEDRYRENMYR 36

Search completed: October 26, 2004, 15:42:09
Job time : 36.4167 secs

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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:39:39 ; Search time 34.4167 Seconds
(without alignments)
131.698 Million cell updates/sec

Title: US-09-603-832-5

Perfect score: 86

Sequence: 1 NDWEDRYRENMYR 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1364641 seqs, 323758627 residues

Total number of hits satisfying chosen parameters: 1364641

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Published Applications AA.*
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3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
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18: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	86	100.0	15	14	US-10-346-190-160
2	86	100.0	16	14	US-10-346-190-160
3	86	100.0	16	15	US-10-617-876-18
4	86	100.0	26	15	US-10-346-190-163
5	86	100.0	26	15	US-10-617-876-17
6	86	100.0	124	14	US-10-050-902-324
7	86	100.0	124	14	US-10-050-898-324
8	86	100.0	124	14	US-10-346-190-93
9	86	100.0	164	9	US-09-745-003-12
10	86	100.0	225	14	US-10-301-488A-25
11	86	100.0	225	15	US-10-301-488-25
12	86	100.0	226	14	US-10-205-194-121
13	86	100.0	254	9	US-09-823-494-19

14	86	100.0	254	9	US-09-823-494-28	Sequence 28, Appl
15	86	100.0	254	9	US-09-343-908-1	Sequence 1, Appl
16	86	100.0	254	13	US-10-106-574-5	Sequence 5, Appl
17	86	100.0	254	13	US-10-106-574-6	Sequence 6, Appl
18	86	100.0	254	13	US-10-106-574-7	Sequence 7, Appl
19	86	100.0	254	13	US-10-106-574-8	Sequence 8, Appl
20	86	100.0	254	14	US-10-355-780-10	Sequence 10, Appl
21	86	100.0	254	14	US-10-304-630-20	Sequence 20, Appl
22	86	100.0	254	14	US-10-304-630-21	Sequence 21, Appl
23	86	100.0	254	14	US-10-304-630-22	Sequence 22, Appl
24	86	100.0	254	14	US-10-301-488A-24	Sequence 24, Appl
25	86	100.0	254	14	US-10-410-907A-9	Sequence 9, Appl
26	86	100.0	254	14	US-10-410-907A-10	Sequence 10, Appl
27	86	100.0	254	14	US-10-346-190-87	Sequence 87, Appl
28	86	100.0	254	14	US-10-435-602-1	Sequence 1, Appl
29	86	100.0	254	15	US-10-438-628-2	Sequence 2, Appl
30	86	100.0	254	15	US-10-301-448-24	Sequence 24, Appl
31	86	100.0	254	16	US-10-470-848-9	Sequence 9, Appl
32	86	100.0	350	14	US-10-050-902-323	Sequence 323, App
33	86	100.0	350	14	US-10-050-898-323	Sequence 323, App
34	86	100.0	350	14	US-10-346-190-92	Sequence 92, Appl
35	86	100.0	439	13	US-10-115-984-2	Sequence 2, Appl
36	77	89.5	15	14	US-10-346-190-117	Sequence 117, App
37	77	89.5	15	14	US-10-346-190-119	Sequence 119, App
38	77	89.5	15	14	US-10-346-190-121	Sequence 121, App
39	77	89.5	16	14	US-10-346-190-127	Sequence 127, App
40	77	89.5	16	14	US-10-346-190-129	Sequence 129, App
41	77	89.5	16	14	US-10-346-190-131	Sequence 131, App
42	77	89.5	16	15	US-10-617-876-24	Sequence 24, Appl
43	77	89.5	25	14	US-10-346-190-116	Sequence 116, App
44	77	89.5	25	14	US-10-346-190-118	Sequence 118, App
45	77	89.5	25	14	US-10-346-190-120	Sequence 120, App

ALIGNMENTS

RESULT 1
US-10-346-190-160
; Sequence 160, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Pion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 160
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Murine prpshort
US-10-346-190-160

Query Match 100.0%; Score 86; DB 14; Length 15;
Best Local Similarity 100.0%; Pred. No. 3.2e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NDWEDRYRENMYR 14

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Db 2 NDWEDRYRENMYR 15
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RESULT 2
US-10-346-190-164
; Sequence 164, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 164
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Murine cprshort
US-10-346-190-164
Query Match 100.0%; Score 86; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 3.4e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
|||||
Db 3 NDWEDRYRENMYR 16
|||||

RESULT 3
US-10-617-876-18
; Sequence 18, Application US/10617876
; Publication No. US20040076611A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin F
; APPLICANT: Tissot, Alain
; APPLICANT: Pumpens, Paul
; APPLICANT: Cielens, Indulis
; APPLICANT: Renhofs, Regina
; TITLE OF INVENTION: Molecular Antigen Arrays
; FILE REFERENCE: 1700.0310001
; CURRENT APPLICATION NUMBER: US/10/617,876
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 60/396,126
; PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 125
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 18
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: prion peptide "cprshort"
US-10-617-876-18
Query Match 100.0%; Score 86; DB 15; Length 16;
Best Local Similarity 100.0%; Pred. No. 3.4e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
|||||
Db 13 NDWEDRYRENMYR 26
|||||

RESULT 5
US-10-617-876-17
; Sequence 17, Application US/10617876
; Publication No. US20040076611A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin F
; APPLICANT: Tissot, Alain
; APPLICANT: Pumpens, Paul
; APPLICANT: Cielens, Indulis
; APPLICANT: Renhofs, Regina
; TITLE OF INVENTION: Molecular Antigen Arrays
; FILE REFERENCE: 1700.0310001
; CURRENT APPLICATION NUMBER: US/10/617,876
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 60/396,126
; PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 125
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 17
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: prion peptide "cprplong"
US-10-617-876-17
Query Match 100.0%; Score 86; DB 15; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.5e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
|||||
Db 13 NDWEDRYRENMYR 26
|||||

RESULT 4
US-10-346-190-163
; Sequence 163, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 163
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Murine cprplong
US-10-346-190-163
Query Match 100.0%; Score 86; DB 14; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.5e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
|||||
Db 13 NDWEDRYRENMYR 26
|||||
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Best Local Similarity 100.0%; Pred. No. 5.5e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 13 NDWEDRYRENMYR 26

RESULT 6
US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Piossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPt construct
US-10-050-902-324

Query Match 100.0%; Score 86; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 2.7e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 23 NDWEDRYRENMYR 36

RESULT 7
US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Piossek, Christine
; APPLICANT: Ortman, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenberg, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19

; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Protein sequence of mPrPt
US-10-050-898-324

Query Match 100.0%; Score 86; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 2.7e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 23 NDWEDRYRENMYR 36

RESULT 8
US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pellicoli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 93
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPt
US-10-346-190-93

Query Match 100.0%; Score 86; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 2.7e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
Db 23 NDWEDRYRENMYR 36

RESULT 9
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J

; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: Prp2
; CURRENT APPLICATION NUMBER: US/09/745.003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: Prt
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 86; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 3.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 52 NDWEDRYRENMYR 65

RESULT 10

US-10-301-488A-25
; Sequence 25, Application US/10301488A
; Publication No. US20030166558A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301.488A
; CURRENT FILING DATE: 2002-11-21
; PRIOR FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 25
; LENGTH: 225
; TYPE: Prt
; ORGANISM: Rat
US-10-301-488A-25

Query Match 100.0%; Score 86; DB 14; Length 225;
Best Local Similarity 100.0%; Pred. No. 5e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 115 NDWEDRYRENMYR 128

RESULT 11

US-10-301-448-25
; Sequence 25, Application US/10301448
; Publication No. US20040095964A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301.448
; CURRENT FILING DATE: 2003-02-21
; PRIOR FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55

; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 25
; LENGTH: 225
; TYPE: Prt
; ORGANISM: Rat
US-10-301-448-25

Query Match 100.0%; Score 86; DB 15; Length 225;
Best Local Similarity 100.0%; Pred. No. 5e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 115 NDWEDRYRENMYR 128

RESULT 12

US-10-205-194-121
; Sequence 121, Application US/10205194
; Publication No. US20030134301A1
; GENERAL INFORMATION:
; APPLICANT: Warner-Lambert Company
; APPLICANT: Lee, Kevin
; APPLICANT: Dixon, Alistair
; APPLICANT: Brookspank, Robert
; APPLICANT: Pincock, Robert
; TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
; FILE REFERENCE: WL-A-018201
; CURRENT APPLICATION NUMBER: US/10/205.194
; CURRENT FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: GB 0118354.0
; PRIOR FILING DATE: 2001-07-27
; NUMBER OF SEQ ID NOS: 177
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 121
; LENGTH: 226
; TYPE: Prt
; ORGANISM: Rattus norvegicus
; FEATURE:
; OTHER INFORMATION: Prp
US-10-205-194-121

Query Match 100.0%; Score 86; DB 14; Length 226;
Best Local Similarity 100.0%; Pred. No. 5e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 115 NDWEDRYRENMYR 128

RESULT 13

US-09-823-494-19
; Sequence 19, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823.494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128.450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 254
; TYPE: Prt
; ORGANISM: Mus musculus

US-09-823-494-19

Query Match 100.0%; Score 86; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 5.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
| | | | | | | | | | | | | | | |
Db 142 NDWEDRYRENMYR 155

RESULT 14

US-09-823-494-28
; Sequence 28, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 28
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-823-494-28

Query Match 100.0%; Score 86; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 5.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
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Db 142 NDWEDRYRENMYR 155

RESULT 15

US-09-943-906-1
; Sequence 1, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/943,906
; FILING DATE: 30-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/550,374
; FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-943-906-1

Query Match 100.0%; Score 86; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 5.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
| | | | | | | | | | | | | | | |
Db 142 NDWEDRYRENMYR 155

Search completed: October 26, 2004, 15:46:47
Job time : 34.4167 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:40:14 ; Search time 121.917 Seconds
(without alignments)
127.234 Million cell updates/sec

Title: US-09-603-832-5
Perfect score: 86
Sequence: 1 NDWEDRYRENNYR 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 6730630 seqs, 1107998698 residues

Total number of hits satisfying chosen parameters: 6730630

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	86	100.0	14	20	US-09-603-832-5	Sequence 5, Appli
2	86	100.0	15	29	US-10-346-190-160	Sequence 160, App
3	86	100.0	15	29	US-10-346-190A-160	Sequence 160, App
4	86	100.0	16	26	US-10-050-902A-365	Sequence 365, App
5	86	100.0	16	29	US-10-346-190-164	Sequence 164, App
6	86	100.0	16	29	US-10-346-190A-164	Sequence 164, App
7	86	100.0	16	32	US-10-617-876-18	Sequence 18, Appli
8	86	100.0	21	1	PCT-US03-16448-7	Sequence 7, Appli
9	86	100.0	21	1	PCT-US03-31057-7	Sequence 7, Appli
10	86	100.0	26	26	US-10-050-902A-364	Sequence 364, App
11	86	100.0	26	29	US-10-346-190-163	Sequence 163, App
12	86	100.0	26	29	US-10-346-190A-163	Sequence 163, App
13	86	100.0	26	32	US-10-617-876-17	Sequence 17, Appl
14	86	100.0	33	24	US-09-913-345-24	Sequence 24, Appl
15	86	100.0	45	20	US-09-603-832-2	Sequence 2, Appli
16	86	100.0	103	22	US-09-791-537-19613	Sequence 19613, A
17	86	100.0	124	26	US-10-050-902-324	Sequence 324, App
18	86	100.0	124	26	US-10-050-902A-324	Sequence 324, App
19	86	100.0	124	26	US-10-050-902A-324	Sequence 324, App
20	86	100.0	124	29	US-10-346-190-93	Sequence 93, Appl
21	86	100.0	124	29	US-10-346-190A-93	Sequence 93, Appl
22	86	100.0	164	21	PCT-US03-16448-252	Sequence 252, App
23	86	100.0	200	1	PCT-US03-31057-196	Sequence 196, App
24	86	100.0	200	1	PCT-US03-16448-251	Sequence 251, App
25	86	100.0	201	1	PCT-US03-31057-195	Sequence 195, App
26	86	100.0	201	1	PCT-US03-16448-250	Sequence 250, App
27	86	100.0	202	1	PCT-US03-31057-194	Sequence 194, App
28	86	100.0	202	1	PCT-US03-16448-249	Sequence 249, App
29	86	100.0	203	1	PCT-US03-31057-193	Sequence 193, App
30	86	100.0	203	1	PCT-US03-16448-248	Sequence 248, App
31	86	100.0	204	1	PCT-US03-31057-192	Sequence 192, App
32	86	100.0	204	1	PCT-US03-16448-247	Sequence 247, App
33	86	100.0	205	1	PCT-US03-31057-191	Sequence 191, App
34	86	100.0	205	1	PCT-US03-16448-57	Sequence 57, Appl
35	86	100.0	208	1	PCT-US03-31057-57	Sequence 57, Appl
36	86	100.0	208	1	PCT-US03-16448-56	Sequence 56, Appl
37	86	100.0	208	23	US-09-831-624-1	Sequence 56, Appl
38	86	100.0	209	1	PCT-US03-31057-56	Sequence 56, Appl
39	86	100.0	209	1	PCT-US03-16448-55	Sequence 55, Appl
40	86	100.0	210	1	PCT-US03-31057-55	Sequence 55, Appl
41	86	100.0	210	1	PCT-US03-16448-54	Sequence 54, Appl
42	86	100.0	211	1	PCT-US03-31057-54	Sequence 54, Appl
43	86	100.0	211	1	PCT-US03-16448-54	Sequence 54, Appl
44	86	100.0	211	1	PCT-US03-31057-54	Sequence 54, Appl
45	86	100.0	211	19	US-09-591-632-19	Sequence 19, Appl

ALIGNMENTS

RESULT 1
US-09-603-832-5
; Sequence 5, Application US/09603832
; GENERAL INFORMATION:
; APPLICANT: Kondejewski, Leslie H.
; APPLICANT: Irvin, Randall T.
; APPLICANT: Hodges, Robert S.
; TITLE OF INVENTION: Polypeptide Compositions Formed Using a
; FILE REFERENCE: 7900-0015.30
; CURRENT APPLICATION NUMBER: US/09/603,832
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/141,203
; PRIOR FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 14
; TYPE: PRT
; ORGANISM: mouse

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US-09-603-832-5
Query Match      100.0%; Score 86; DB 20; Length 14;
Best Local Similarity 100.0%; Pred. No. 2.7e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 1 NDWEDRYRENMYR 14

RESULT 2
US-10-346-190-160
; Sequence 160, Application US/10346190
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 160
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Murine prpshort
US-10-346-190-160
Query Match      100.0%; Score 86; DB 29; Length 15;
Best Local Similarity 100.0%; Pred. No. 2.9e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 2 NDWEDRYRENMYR 15

RESULT 3
US-10-346-190-160
; Sequence 160, Application US/10346190A
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190A
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: 60/331,045
; PRIOR FILING DATE: 2002-01-17
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 365
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: cprpshort prion peptide
US-10-050-902A-365
Query Match      100.0%; Score 86; DB 26; Length 16;
Best Local Similarity 100.0%; Pred. No. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 3 NDWEDRYRENMYR 16

RESULT 5
US-10-346-190-164
; Sequence 164, Application US/10346190
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
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APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.029003
CURRENT APPLICATION NUMBER: US/10/346.190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 164
LENGTH: 16
TYPE: PRT
ORGANISM: Murine cprpshort
US-10-346-190-164

Query Match 100.0%; Score 86; DB 29; Length 16;
Best Local Similarity 100.0%; Pred. No. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 3 NDWEDRYRENMYR 16

RESULT 6
US-10-346-190A-164
Sequence 164, Application US/10346190A
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.029003
CURRENT APPLICATION NUMBER: US/10/346.190A
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: 60/331,045
PRIOR FILING DATE: 2001-11-07
PRIOR APPLICATION NUMBER: 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: 60/262,379
PRIOR FILING DATE: 2001-01-19
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 164
LENGTH: 16
TYPE: PRT
ORGANISM: Murine cprpshort
US-10-346-190A-164

Query Match 100.0%; Score 86; DB 29; Length 16;
Best Local Similarity 100.0%; Pred. No. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 3 NDWEDRYRENMYR 16

RESULT 7
US-10-617-876-18
Sequence 18, Application US/10617876
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin F
APPLICANT: Tissot, Alain
APPLICANT: Pumpens, Paul
APPLICANT: Cielens, Indulis
APPLICANT: Renhofs, Regina
TITLE OF INVENTION: Molecular Antigen Arrays
FILE REFERENCE: 1700.0310001
CURRENT APPLICATION NUMBER: US/10/617,876
CURRENT FILING DATE: 2003-07-14
PRIOR APPLICATION NUMBER: US 60/396,126
PRIOR FILING DATE: 2002-07-17
NUMBER OF SEQ ID NOS: 125
SOFTWARE: PatentIn version 3.2
SEQ ID NO 18
LENGTH: 16
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: prion peptide "cprpshort"
US-10-617-876-18

Query Match 100.0%; Score 86; DB 32; Length 16;
Best Local Similarity 100.0%; Pred. No. 3.1e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 3 NDWEDRYRENMYR 16

RESULT 8
PCT-US03-16448-7
Sequence 7, Application PC/TUS0316448
GENERAL INFORMATION:
APPLICANT: Chiron Corporation
TITLE OF INVENTION: METHODS OF GENERATING ANTIBODIES TO PRION CHIMERAS AND USES
FILE REFERENCE: PPI9275.002 (2300-19275.40)
CURRENT APPLICATION NUMBER: PCT/US03/16448
CURRENT FILING DATE: 2003-05-22
PRIOR APPLICATION NUMBER: 60/383,193
PRIOR FILING DATE: 2002-05-22
PRIOR APPLICATION NUMBER: 60/383,030
PRIOR FILING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 265
SOFTWARE: PatentIn version 3.2
SEQ ID NO 7
LENGTH: 21
TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: Amino Acid Sequence of a Fragment of Mouse Prion Protein: PCT-US03-16448-7
PCT-US03-16448-7

Query Match 100.0%; Score 86; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 4.2e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 8 NDWEDRYRENMYR 21

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RESULT 9
PCT-US03-31057-7
; Sequence 7, Application PC/TUS0331057
; GENERAL INFORMATION:
; APPLICANT: Chiron Corporation
; TITLE OF INVENTION: PRION CHIMERAS AND USES THEREOF
; FILE REFERENCE: PP21304.001
; CURRENT APPLICATION NUMBER: PCT/US03/31057
; CURRENT FILING DATE: 2003-09-30
; PRIOR APPLICATION NUMBER: 60/502032
; PRIOR FILING DATE: 2003-09-10
; NUMBER OF SEQ ID NOS: 209
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Mouse PrP (135 - 155)
PCT-US03-31057-7

Query Match          100.0%; Score 86; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 4.2e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 8 NDWEDRYRENMYR 21

RESULT 10
US-10-050-902A-364
; Sequence 364, Application US/10050902A
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Plossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050.902A
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 430
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 364
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: cprplong prion peptide
US-10-050-902A-364

Query Match          100.0%; Score 86; DB 26; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.4e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 13 NDWEDRYRENMYR 26

RESULT 11
US-10-346-190-163
; Sequence 163, Application US/10346190
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346.190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: 60/331,045
; PRIOR FILING DATE: 2001-11-07
; PRIOR APPLICATION NUMBER: 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: 60/262,379
; PRIOR FILING DATE: 2001-01-19
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 163
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Murine cprplong
US-10-346-190-163

Query Match          100.0%; Score 86; DB 29; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.4e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
DB 13 NDWEDRYRENMYR 26

RESULT 12
US-10-346-190A-163
; Sequence 163, Application US/10346190A
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346.190A
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: 60/331,045
; PRIOR FILING DATE: 2001-11-07
; PRIOR APPLICATION NUMBER: 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: 60/262,379
; PRIOR FILING DATE: 2001-01-19
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 163
; LENGTH: 26

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; TYPE: PRT
; ORGANISM: Murine cprplong
US-10-346-190A-163

Query Match 100.0%; Score 86; DB 29; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.4e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
| | | | | | | | | | | | | | | | | | | | | |
Db 13 NDWEDRYRENMYR 26

RESULT 13
US-10-617-876-17
; Sequence 17, Application US/10617876
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin F
; APPLICANT: Tissot, Alain
; APPLICANT: Pumpens, Paul
; APPLICANT: Cielens, Indulis
; APPLICANT: Renhofs, Regina
; TITLE OF INVENTION: Molecular Antigen Arrays
; FILE REFERENCE: 1700.0310001
; CURRENT APPLICATION NUMBER: US/10/617,876
; CURRENT FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: US 60/396,126
; PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 125
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 17
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: prion peptide "cprplong"
US-10-617-876-17

Query Match 100.0%; Score 86; DB 32; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.4e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
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Db 13 NDWEDRYRENMYR 26

RESULT 14
US-09-913-345-24
; Sequence 24, Application US/09913345
; GENERAL INFORMATION:
; APPLICANT: Garssen, Gerrit J.
; APPLICANT: Jacobs, Jorg G.
; APPLICANT: Langeveld, Joannes P.M.
; APPLICANT: Smits, Marinus A.
; APPLICANT: van Keulen, Lucien J.M.
; APPLICANT: Schreuder, Bram E.C.
; APPLICANT: Bosseers, Alexander
; TITLE OF INVENTION: Prion Test
; FILE REFERENCE: 2183-5034US
; CURRENT APPLICATION NUMBER: US/09/913,345
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER: PCT/NL00/00079
; PRIOR FILING DATE: 2000-02-09
; PRIOR APPLICATION NUMBER: EP 99200391.3
; PRIOR FILING DATE: 1999-02-11
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 24
; LENGTH: 33
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-09-913-345-24

Query Match 100.0%; Score 86; DB 24; Length 33;
Best Local Similarity 100.0%; Pred. No. 7e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
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Db 2 NDWEDRYRENMYR 15

RESULT 15
US-09-603-832-2
; Sequence 2, Application US/09603832
; GENERAL INFORMATION:
; APPLICANT: Kondejewski, Leslie H.
; APPLICANT: Irvin, Randall T.
; APPLICANT: Hodges, Robert S.
; TITLE OF INVENTION: Polypeptide Compositions Formed Using a
; FILE REFERENCE: 7900-0015.30
; CURRENT APPLICATION NUMBER: US/09/603,832
; CURRENT FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/141,203
; PRIOR FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 45
; TYPE: PRT
; ORGANISM: mouse
US-09-603-832-2

Query Match 100.0%; Score 86; DB 20; Length 45;
Best Local Similarity 100.0%; Pred. No. 9.9e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
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Db 20 NDWEDRYRENMYR 33

Search completed: October 26, 2004, 15:53:52
Job time : 122.917 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:36:59 ; Search time 8.16667 seconds
(without alignments)
164.943 Million cell updates/sec

Title: US-09-603-832-5
Perfect score: 86
Sequence: 1 NDWEDRYRENMYR 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : PIR_79:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	86	100.0	226	A53892	prion-related prote
2	86	100.0	254	A23544	major prion protei
3	77	89.5	232	S71041	major prion protei
4	77	89.5	239	S53633	major prion protei
5	77	89.5	241	S71048	major prion protei
6	77	89.5	241	S71056	major prion protei
7	77	89.5	245	S53627	major prion protei
8	77	89.5	245	S71045	major prion protei
9	77	89.5	252	S53634	major prion protei
10	77	89.5	252	S53631	major prion protei
11	77	89.5	252	S71045	major prion protei
12	77	89.5	252	J65175	major prion protei
13	77	89.5	253	S53623	major prion protei
14	77	89.5	253	S53620	major prion protei
15	77	89.5	253	S53625	major prion protei
16	77	89.5	253	S53625	major prion protei
17	77	89.5	253	S53625	major prion protei
18	77	89.5	253	S71055	major prion protei
19	77	89.5	253	S53616	major prion protei
20	77	89.5	253	S53618	major prion protei
21	77	89.5	253	S53619	major prion protei
22	77	89.5	254	1 UH9YIH	major prion protei
23	77	89.5	254	S34759	major prion PrP-Sc
24	77	89.5	254	A34759	prion protein - go
25	77	89.5	256	S37149	prion protein - Ch
26	77	89.5	256	A54281	major prion protei
27	77	89.5	257	JQ1900	major prion protei
28	77	89.5	257	A23545	major prion PrP27-
29	77	89.5	260	S53629	major prion protei

30	72	83.7	256	2 JU0268	major prion protei
31	72	83.7	264	2 S37137	prion protein - gr
32	67	77.9	253	1 UHHU	major prion protei
33	67	77.9	253	2 S53617	major prion protei
34	67	77.9	253	2 S53635	prion protein - si
35	67	77.9	253	2 S53614	major prion protei
36	67	77.9	253	2 I37032	major prion protei
37	67	77.9	253	2 I61847	major prion protei
38	67	77.9	264	2 A54330	major prion protei
39	55	64.0	447	2 A64934	Succinylarginine d
40	55	64.0	447	2 C90935	hypothetical prote
41	55	64.0	447	2 G85783	hypothetical prote
42	48	55.8	447	2 AG0709	succinylarginine d
43	46	53.5	703	2 A64351	hypothetical prote
44	44.5	51.7	567	2 G90537	lipoprotein (impor
45	44	51.2	218	2 S10613	ribosomal protein

ALIGNMENTS

RESULT 1

A53892
Prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Liaw, Y.C.; Itoke, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LTA>
A:Cross-references: UNIPROT:P13852; GB:M20313; MID:g206391; PIDN:AAA1947.1; PID:g20639
C:Superfamily: major prion protein

Query Match 100.0%; Score 86; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 2.8e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
|||
Db 115 NDWEDRYRENMYR 128

RESULT 2

A23544
major prion protein precursor - mouse
N:Alternate names: PrP; Scrapie prion
C:Species: Mus musculus (house mouse)
C:Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004
C:Accession: A23544; S02521; A22315
R:Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, C.
Cell 51, 651-662, 1987
A:Title: Distinct prion proteins in short and long scrapie incubation period mice.
A:Reference number: A23544; MUID:88052869; PMID:2890436
A:Accession: A23544
A:Molecule type: DNA
A:Residues: 1-254 <WES>
A:Cross-references: UNIPROT:P04925; GB:M18070; MID:g200528; PIDN:AAA39997.1; PID:g20052
A:Experimental source: strains NZW and I/LnJ
A>Note: the sequence shown is from the NZW strain; the sequence from the I/LnJ strain d
R:Locht, C.; Chesebro, B.; Race, R.; Keith, J.M.
Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986
A:Reference number: A23544; MUID:86313583; PMID:3462700
A:Accession: A23544
A:Molecule type: mRNA
A:Residues: 1-254 <LOC>
R:Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.
Eur. J. Biochem. 172, 271-277, 1988
A:Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53621
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-203,'R',205-240 <SCW>
 A:Cross-references: EMBL:U08303
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 241;
 Best Local Similarity 92.9%; Pred. No. 7.9e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
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 Db 136 NDYEDRYRENMYR 149

RESULT 7

S53627
 C:Species: Cercopithecus aethiops (green monkey, grivet)
 C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53627; S71043
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53627
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: UNIPROT:P40250; EMBL:U08291
 R:Schatzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71043
 A:Molecule type: DNA
 A:Residues: 1-10,'V',12-202,'E',204-245 <SCW>
 A:Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50081.1; PID:G474341
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 245;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 ||:|||||
 Db 135 NDYEDRYRENMYR 148

RESULT 8

S71045
 C:Species: Cercopithecus diana
 C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71045; S53628
 R:Schatzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71045
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G474343
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53628
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA

A:Residues: 8-10,'L',12-202,'R',204-239 <SCW>
 A:Cross-references: EMBL:U08292
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 245;
 Best Local Similarity 92.9%; Pred. No. 8e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 ||:|||||
 Db 135 NDYEDRYRENMYR 148

RESULT 9

S53634
 C:Species: Callithrix jacchus (common marmoset)
 C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53634; S71047
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53634
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>
 A:Cross-references: UNIPROT:P40247; EMBL:U08304
 R:Schatzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71047
 A:Molecule type: DNA
 A:Residues: 1-209,'E',211-252 <SCW>
 A:Cross-references: EMBL:U08304; NID:G474366; PIDN:AAC50092.1; PID:G474367
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 252;
 Best Local Similarity 92.9%; Pred. No. 8.3e-05;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14
 ||:|||||
 Db 142 NDYEDRYRENMYR 155

RESULT 10

S53631
 C:Species: Cebus apella (brown capuchin, black-capped capuchin)
 C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53631; S71044
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53631
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>
 A:Cross-references: UNIPROT:P40249; EMBL:U08295
 R:Schatzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71044
 A:Molecule type: DNA
 A:Residues: 1-209,'E',211-252 <SCW>
 A:Cross-references: EMBL:U08295; NID:G474348; PIDN:AAC50084.1; PID:G474349
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

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Query Match      89.5%; Score 77; DB 2; Length 252;
Best Local Similarity 92.9%; Pred. No. 8.3e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
DB      142 NDYEDRYRENMYR 155

RESULT 11
I61848
major prion protein precursor - common squirrel monkey
C:Species: Sajmiri sciureus (common squirrel monkey)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C:Accession: J61848
R:Cervenakova L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.;
Pro Natl Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: 136907; MUID:95083661; PMID:7991600
A:Accession: I61848
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-252 <RES>
A:Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G595852; PIDN:AAA68636.1; PID:G5958
C:Superfamily: major prion protein

Query Match      89.5%; Score 77; DB 2; Length 252;
Best Local Similarity 92.9%; Pred. No. 8.3e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
DB      142 NDYEDRYRENMYR 155

RESULT 12
JC6175
prion protein - rabbit
C:Species: Oryctolagus cuniculus (domestic rabbit)
C>Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 09-Jul-2004
C:Accession: JC6175
R:Loftus, B.; Rogers, M.
Gene 184, 215-219, 1997
A>Title: Characterization of a prion protein (Prp) gene from rabbit; a species with appa
A:Reference number: JC6175; MUID:97183665; PMID:9031631
A:Accession: JC6175
A:Molecule type: DNA
A:Residues: 1-252 <LOF>
A:Cross-references: UNIPROT:Q95211; GB:U28334; NID:G1490412; PIDN:AAC48697.1; PID:G14904
C:Comment: This protein is a cellular protein, it is involved in the neurodegenerative p
C:Genetics:
A:Gene: Prp
C:Superfamily: major prion protein
C:Keywords: disulfide bond; prion

Query Match      89.5%; Score 77; DB 2; Length 252;
Best Local Similarity 92.9%; Pred. No. 8.3e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
DB      142 NDYEDRYRENMYR 155

RESULT 13
S53624
major prion protein - stump-tailed macaque
C:Species: Macaca arctoides (stump-tailed macaque)
C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C:Accession: S53624; S71051
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53620
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>

A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53624
A:Molecule type: DNA
A:Residues: 1-210, 'E', 212-253 <SCW>
A:Cross-references: EMBL:U08311; NID:G475583; PIDN:AAC50099.1; PID:G475584
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      89.5%; Score 77; DB 2; Length 253;
Best Local Similarity 92.9%; Pred. No. 8.3e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
DB      143 NDYEDRYRENMYR 156

RESULT 14
S53623
major prion protein - crab-eating macaque
C:Species: Macaca fascicularis (crab-eating macaque)
C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C:Accession: S53623; S71052
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53623
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08298; NID:G474354; PIDN:AAC50087.1; PID:G474355
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      89.5%; Score 77; DB 2; Length 253;
Best Local Similarity 92.9%; Pred. No. 8.3e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDWEDRYRENMYR 14
DB      143 NDYEDRYRENMYR 156

RESULT 15
S53620
major prion protein - hamadryas baboon
C:Species: Papio hamadryas (hamadryas baboon)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C:Accession: S53620; S71058
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53620
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>

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A;Cross-references: ENBL:U08294
R;Schatzl, H.M.
Submitted to the ENBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71058
A;Molecule type: DNA
A;Residues: 1-210, 'E', 212-253 <SCW>
A;Cross-references: ENBL:U08294; NID:G474346; PIDN:AAC50083.1; PID:G474347
C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 253;
Best Local Similarity 92.9%; Pred. No. 8.3e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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|:|||||
Db 143 NDYEDRYRENMYR 156

Search completed: October 26, 2004, 15:44:43
Job time : 9.16667 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:34:24 ; Search time 33.5417 Seconds
(without alignments)
240.156 Million cell updates/sec

Title: US-09-603-832-5

Perfect score: 86

Sequence: 1 NDWEDRYRENMYR 14

Scoring table: BLOSUM62

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Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt_02:*

1: uniprot_sprot:*

2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	86	100.0	253	Q9Z0T5	Q9Z0T5 meriones un
2	86	100.0	254	P10 MOUSE	P04925 mus musculus
3	86	100.0	254	P10 RAT	P13852 ractus norv
4	86	100.0	254	P10 SIGHI	Q9Z0T3 sigmodon hi
5	86	100.0	254	Q9Z0T4	Q9Z0T4 sigmodon fu
6	86	100.0	254	Q9QYT9	Q9QYT9 mus musculus
7	86	100.0	254	Q8VHV6	Q8VHV6 apodemus sy
8	86	100.0	254	AAD19993	Aad19993 rattus no
9	77	89.5	67	Q6JUY8	Q6JUY8 ovis aries
10	77	89.5	67	Q6JUY9	Q6JUY9 ovis aries
11	77	89.5	67	AAQ81751	AAQ81751 ovis arie
12	77	89.5	67	AAQ81752	AAQ81752 ovis arie
13	77	89.5	124	Q9TU20	Q9TU20 varicia var
14	77	89.5	134	Q6PR45	Q6PR45 ovis aries
15	77	89.5	134	AAT09129	AAT09129 ovis arie
16	77	89.5	145	Q7BEH4	Q7BEH4 mesocricetu
17	77	89.5	185	Q97694	Q97694 cervus nipp
18	77	89.5	195	Q97693	Q97693 canis lupus
19	77	89.5	195	Q97903	Q97903 addax nasom
20	77	89.5	197	Q6RV12	Q6RV12 ovis aries
21	77	89.5	197	Q6RV14	Q6RV14 ovis aries
22	77	89.5	197	Q6RV15	Q6RV15 ovis aries
23	77	89.5	197	Q6RV16	Q6RV16 ovis aries
24	77	89.5	197	AAR37329	AAR37329 ovis arie
25	77	89.5	197	AAR37330	AAR37330 ovis arie
26	77	89.5	197	AAR37331	AAR37331 ovis arie
27	77	89.5	197	AAR37333	AAR37333 ovis arie
28	77	89.5	202	Q97696	Q97696 lama glama
29	77	89.5	202	Q97908	Q97908 capra nubia
30	77	89.5	204	Q97629	Q97629 odocoileus
31	77	89.5	204	Q9TSI7	Q9TSI7 odocoileus

32	77	89.5	204	2	Q9TSI8	Q9TSI8 odocoileus
33	77	89.5	209	2	Q9TV02	Q9TV02 camelus dco
34	77	89.5	211	2	Q77787	Q77787 antilocapra
35	77	89.5	212	2	Q97698	Q97698 cervus elap
36	77	89.5	213	2	Q9TV04	Q9TV04 canis famil
37	77	89.5	214	2	Q9TV03	Q9TV03 canis famil
38	77	89.5	215	2	Q811W3	Q811W3 spalax leuc
39	77	89.5	220	2	Q02825	Q02825 odocoileus
40	77	89.5	220	2	Q7J372	Q7J372 odocoileus
41	77	89.5	221	2	Q866V1	Q866V1 procavia ca
42	77	89.5	222	2	Q97913	Q97913 equus burch
43	77	89.5	222	2	Q7YRX1	Q7YRX1 procyon lot
44	77	89.5	223	2	Q97910	Q97910 hippotragus
45	77	89.5	223	2	Q866W3	Q866W3 sorex ciner

ALIGNMENTS

RESULT 1

Q9Z0T5 PRELIMINARY; PRT; 253 AA.
AC Q9Z0T5; 1999 (TRENBLrel. 10, Created)
DT 01-MAY-1999 (TRENBLrel. 10, Last sequence update)
DT 01-JUN-2003 (TRENBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
OC Meriones.
OX NCBI_TaxID=10047;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL: AF117314; AAD19985.1; .
DR InterPro: IPR000817; Prion; 1.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
KW SEQUENCE 253 AA; 27747 MW; B4D16867A97307F CRC64;
SQ

Query Match 100.0%; Score 86; DB 2; Length 253;

Best local similarity 100.0%; Pred. NO. 2.3e-05;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14

DB 142 NDWEDRYRENMYR 155

RESULT 2

P10 MOUSE STANDARD; PRT; 254 AA.
ID P10 MOUSE
AC P04925;
DT 13-AUG-1987 (Rel. 05, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DT 01-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=Prp; Synonyms=Prn-p;

OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OX Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RP [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=NZW, and I/LNI;
 RX MEDLINE=8052869; PubMed=2890436;
 RA Westaway D., Goodman P.A., Mirenda C.A., McKinley M.P., Carlson G.A.,
 RA Prusiner S.B.;
 RT "Distinct prion proteins in short and long scrapie incubation period
 RT mice.";
 RL Cell 51:651-662(1987).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=86313583; PubMed=3462700;
 RA Lochte C., Chesebro B., Race R., Keith J.M.;
 RT "Molecular cloning and complete sequence of prion protein cDNA from
 RT mouse brain infected with the scrapie agent";
 RL Proc. Natl. Acad. Sci. U.S.A. 83:6372-6376(1986).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=8616695; PubMed=2894984;
 RA Hope J., Multhaup G., Reekie L.J.D., Kimberlin R.H., Beyreuther K.;
 RT "Molecular pathology of scrapie-associated fibril protein (PrP) in
 RT mouse brain affected by the ME7 strain of scrapie.";
 RL Eur. J. Biochem. 172:271-277(1988).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=NZW; TISSUE=Brain;
 RX MEDLINE=99018115; PubMed=979790;
 RA Lee I.Y., Westaway D., Smit A.F.A., Wang K., Seto J., Chen L.,
 RA Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Prusiner S.B.,
 RA Hood L.E.;
 RT "Complete genomic sequence and analysis of the prion protein gene
 RT region from three mammalian species";
 RL Genome Res. 8:1022-1037(1998).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=22398257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner J., Shenon C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore I., Max S., Wang J., Hsieh F.,
 RA Diatchenko L., Matovina K., Farmer A., Rubin G.M., Hong L.,
 RA Stapietson M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Frange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [6]
 RP SEQUENCE OF 87-164 FROM N.A.
 RX MEDLINE=85213844; PubMed=3923361;
 RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,
 RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.;
 RT "Identification of scrapie prion protein-specific mRNA in scrapie-
 RT infected and uninfected brain";
 RL Nature 315:331-333(1985).
 RN [7]
 RP STRUCTURE BY NMR OF 120-230.
 RX MEDLINE=96317593; PubMed=8700211;
 RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,
 RA Wuthrich K.;
 RT "NMR structure of the mouse prion protein domain PrP(121-321).";
 RL Nature 382:180-182(1996).
 RN [8]
 RP STRUCTURE BY NMR OF 23-231.
 RX MEDLINE=97424376; PubMed=9380398;
 RA Riek R., Hornemann S., Wider G., Glockshuber R., Wuthrich K.;
 RT "NMR characterization of the full-length recombinant murine prion
 RT protein, mPrP(23-231).";
 RL FEBS Lett. 413:282-286(1997).
 RN [9]
 RP HYDROXYLATION OF PRO-44
 RX MEDLINE=20490364; PubMed=11032800;
 RA Gill A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G.,
 RA Bocking S.P., Rhie A.G.O., Bennett A.D., Hope J.;
 RT "Post-translational hydroxylation at the N-terminus of the prion
 RT protein reveals presence of PPII structure in vivo";
 RL EMBO J. 19:5324-5331(2000).
 CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL: M18070; AAA39997.1; -
 CC EMBL: M18071; AAA39998.1; -
 CC EMBL: M13685; AAA39996.1; -
 CC EMBL: U29186; AAC02804.1; -
 CC EMBL: BC006703; AAH06703.1; -
 CC EMBL: M30384; AAA39999.1; -
 CC DDB: A28669; A23544; -
 CC PDB: 1AC2 NMR; #=123-225.
 CC MGD: MGI:97789; Prnp.
 CC GO: GO:0005783; C:cytoplasmic reticulum; IDA.
 CC GO: GO:0005794; C:Golgi apparatus; IDA.
 CC GO: GO:0045121; C:lipid raft; IDA.
 CC GO: GO:0005507; F:copper ion binding; IDA.
 CC GO: GO:0006979; P:response to oxidative stress; IDA.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC PRINTS: PR03991; Prion; octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC 3D-structure: Glycoprotein; GPI-anchor; Hydroxylation; Lipoprotein;
 KW Polymorphism; Prion; Repeat; Signal.
 FT SIGNAL 1 22
 FT CHAIN 23 230 Major prion protein.
 FT PROPEP 231 254 Removed in mature form (By similarity).
 FT MOD_RES 44 44 Hydroxyproline.
 FT LIPID 230 230 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 180 180 N-linked (GlcNAc...) (Probable).
 FT CARBOHYD 196 196 N-linked (GlcNAc...) (Probable).
 FT DISULFID 178 213 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT DOMAIN 51 90 Q.
 FT REPEAT 51 58 1.
 FT REPEAT 59 66 2.
 FT REPEAT 67 74 3.

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FT REPEAT 75 82
FT REPEAT 83 90
FT VARIANT 108 108
FT VARIANT 189 189
FT CONFLICT 133 133
FT TURN 126 126
FT STRAND 128 129
FT HELIX 143 152
FT TURN 153 155
FT STRAND 161 162
FT HELIX 171 191
FT TURN 192 194
FT HELIX 199 221
FT TURN 222 224
SQ SEQUENCE 254 AA; 27977 MW; D5331E6321826CC0 CRC64;

Query Match 100.0%; Score 86; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNNMYR 14
DB 142 NDWEDRYRNNMYR 155

RESULT 3
PRIO_RAT
ID PRIO_RAT STANDARD; PRT; 254 AA.
AC P13852;
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP).
GN Name=Prnp; Synonyms=Prn;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Wistar; TISSUE=Liver;
RX MEDLINE=97033369; PubMed=8879116;
RA Saeki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;
RT "Three-exon structure of the gene encoding the rat prion protein and
its expression in tissues.";
RL Virus Genes 12:15-20(1996).
RN [3]
RP SEQUENCE OF 29-254 FROM N.A.
RX MEDLINE=88037055; PubMed=2889848;
RA Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button J.D.,
RA Clawson G.A.;
RT "Cloning of rat 'prion-related protein' cDNA.";
RL Lab. Invest. 57:370-374(1987).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
"rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: Found in high quantity in the brain of humans and animals
infected with degenerative neurological diseases such as kuru,
Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
(GSS), scrapie, bovine spongiform encephalopathy (BSE),
transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.

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CC -----
CC ENBL; S69654; AAB30728.2;
CC ENBL; DS0093; BAA08790.1;
CC ENBL; M20313; AAM41947.1;
CC PIR; A53892; A53892.
CC HSP; P04925; IAG2.
CC GSD; 3410; Prnp00817; Prion.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prionoctapep; 6.
CC PRINTS; PRO0341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC KW Glycoprotein; GPI-anchor; Potential.
CC FT CHAIN 1 28
FT SIGNAL 29 231
FT PROPEP 232 254
FT LIPID 231 231
FT CARBOHYD 181 181
FT CARBOHYD 197 197
FT DISULFID 179 214
FT DOMAIN 51 91
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 84 91
FT SEQUENCE 254 AA; 27804 MW; 28F424D13BEFA2C6 CRC64;

Query Match 100.0%; Score 86; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNNMYR 14
DB 143 NDWEDRYRNNMYR 156

RESULT 4
PRIO_SIGHI
ID PRIO_SIGHI STANDARD; PRT; 254 AA.
AC Q920F3;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP).
GN Name=Prnp; Synonyms=Prp;
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner P., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999)
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.

```

CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "folds".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL; AF117325; AAD19996.1; -.
 CC HSSP; P04925; IAG2.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC PRINTS; PR00341; Prion.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 CC Signal.
 CC FT SIGNAL 1 22 By similarity.
 CC FT CHAIN 23 231 Major prion protein.
 CC FT PROPEP 232 254 Removed in mature form (By similarity).
 CC FT DOMAIN 51 91 5 X 8 AA tandem repeats of P-H-G-G-W-G-Q.
 CC FT REPEAT 51 59 1.
 CC FT REPEAT 60 67 2.
 CC FT REPEAT 68 75 3.
 CC FT REPEAT 76 83 4.
 CC FT REPEAT 84 91 5.
 CC FT DISULFID 179 214 By similarity.
 CC FT LIPID 231 231 GPI-anchor amidated serine (By
 CC similarity).
 CC FT CARBOHYD 181 181 N-linked (GLNAC...) (Potential).
 CC FT CARBOHYD 197 197 N-linked (GLNAC...) (Potential).
 CC FT SEQUENCE 254 AA; 27874 MW; 50C464D516E572DF CRC64;
 CC
 CC Query Match 100.0%; Score 86; DB 1; Length 254;
 CC Best Local Similarity 100.0%; Pred. No. 2.3e-05;
 CC Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 NDWEDRYRENMYR 14
 CC Db 143 NDWEDRYRENMYR 156
 CC
 CC RESULT 5
 CC Q920T4 PRELIMINARY; PRT; 254 AA.
 CC ID Q920T4
 CC AC Q920T4
 CC DT 01-MAY-1999 (TREMUREl 10, Created)
 CC DT 01-MAY-1999 (TREMUREl 10, Last sequence update)
 CC DT 01-JUN-2003 (TREMUREl 24, Last annotation update)
 CC DE Prion protein (Fragment).
 CC CN Name=PrP;
 CC OS Sigmodon fulviventer (tawny-bellied cotton rat).
 CC OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
 CC OC Sigmodon.
 CC OX NCBI_TaxID=89246;
 CC RN [1]
 CC RP SEQUENCE FROM N.A.
 CC RC TISSUE=Brain;
 CC RX MEDLINE=99303687; PubMed=10373359;
 CC RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,

RA Schwarz T.F., Werner T., Scharl H.M.; PrPs reveals high conservation
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 RT of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 CC -!- SIMILARITY: Belongs to the prion family.
 CC EMBL; AF171324; AAD19995.1; -.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC PRINTS; PR00341; Prion.
 CC SMART; SM00157; PrP; 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC KW Prion.
 CC FT NON_TER 254 254
 CC SQ SEQUENCE 254 AA; 27904 MW; 9EE7E1D106B43B97 CRC64;
 CC
 CC Query Match 100.0%; Score 86; DB 2; Length 254;
 CC Best Local Similarity 100.0%; Pred. No. 2.3e-05;
 CC Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 NDWEDRYRENMYR 14
 CC Db 143 NDWEDRYRENMYR 156
 CC
 CC RESULT 6
 CC Q9QYT9 PRELIMINARY; PRT; 254 AA.
 CC ID Q9QYT9
 CC AC Q9QYT9
 CC DT 01-MAY-2000 (TREMUREl 13, Created)
 CC DT 01-MAY-2000 (TREMUREl 13, Last sequence update)
 CC DT 01-JUN-2003 (TREMUREl 24, Last annotation update)
 CC DE Long incubation prion protein.
 CC GN Name=Prnpb;
 CC OS Mus musculus (Mouse).
 CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 CC OX NCBI_TaxID=10090;
 CC RN [1]
 CC RP SEQUENCE FROM N.A.
 CC RX MEDLINE=99018115; PubMed=9799790;
 CC RX Lee I.Y., Westaway D., Smit A.F., Wang K., Seto J., Chen L.,
 CC Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Prusiner S.B.,
 CC Hood L.E.;
 CC RA "Complete genomic sequence and analysis of the prion protein gene
 RT region from three mammalian species.";
 RL Genome Res. 8:1022-1037(1998).
 CC
 CC SEQUENCE FROM N.A.
 CC RX MEDLINE=99457485; PubMed=10525406;
 CC RX Moore R.C., Lee I.Y., Silverman G.L., Harrison P.M., Strone R.,
 CC Heinrich C., Karunaratne A., Pasternak S.H., Chishti M.A., Liang Y.,
 CC Mastrangelo P., Wang K., Smit A.F.A., Katamine S., Carlson G.A.,
 CC Cohen F.E., Prusiner S.B., Melton D.W., Tremblay P., Hood L.E.,
 CC Westaway D.;
 CC RA "Ataxia in prion protein (PrP)-deficient mice is associated with
 RT upregulation of the novel PrP-like protein doppel.";
 RL J. Mol. Biol. 292:797-817(1999).
 CC -!- SIMILARITY: Belongs to the prion family.
 CC EMBL; U29187; AAD41440.1; -.
 CC HSSP; P04925; IAG2.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC PRINTS; PR00341; Prion.
 CC SMART; SM00157; PrP; 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC KW Prion.
 CC SQ SEQUENCE 254 AA; 28010 MW; DF90D0CE586CC0 CRC64;
 CC
 CC Query Match 100.0%; Score 86; DB 2; Length 254;
 CC Best Local Similarity 100.0%; Pred. No. 2.3e-05;
 CC Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
|||||
Db 142 NDWEDRYRENMYR 155

RESULT 7

Q8VHV6 PRELIMINARY; PRT; 254 AA.
AC Q8VHV6;
DT 01-MAR-2002 (T-EMBLrel. 20, Created)
DT 01-MAR-2002 (T-EMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (T-EMBLrel. 24, Last annotation update)
DE Prion protein.
GN Name=PrP;
OS Apodemus sylvaticus (European woodmouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
OC Apodemus.
OX NCBI_TaxID=10129;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Ono G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367823; AAL57230.1; -;
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_Octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 254 AA; 27857 MW; CB2E5658C47A8885 CRC64;

Query Match 100.0%; Score 86; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
|||||
Db 143 NDWEDRYRENMYR 156

RESULT 8

AAD1993 PRELIMINARY; PRT; 254 AA.
ID AAD1993;
AC AAD1993;
DT 02-MAR-2004 (T-EMBLrel. 27, Created)
DT 02-MAR-2004 (T-EMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (T-EMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PrP.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein."
J. Mol. Biol. 289:1163-1178(1999).
DR EMBL; AF117322; AAD1993.1; -;
DR NON_TER 254

SQ SEQUENCE 254 AA; 27804 MW; 28F424D13BEFA2C6 CRC64;

Query Match 100.0%; Score 86; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
|||||
Db 143 NDWEDRYRENMYR 156

RESULT 9

Q6JUY8 PRELIMINARY; PRT; 67 AA.
ID Q6JUY8;
AC Q6JUY8;
DT 05-JUL-2004 (T-EMBLrel. 27, Created)
DT 05-JUL-2004 (T-EMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (T-EMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RA Zhang L., Li N., Fan B.;
RA Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
RL EMBL; AY304007; AAQ81752.1; -;
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Prion.
FT NON_TER 1
FT NON_TER 67
SQ SEQUENCE 67 AA; 8161 MW; DE400AD18417A3B2 CRC64;

Query Match 89.5%; Score 77; DB 2; Length 67;
Best Local Similarity 92.9%; Pred. No. 0.00013;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
|||||
Db 16 NDWEDRYRENMYR 29

RESULT 10

Q6JUY9 PRELIMINARY; PRT; 67 AA.
ID Q6JUY9;
AC Q6JUY9;
DT 05-JUL-2004 (T-EMBLrel. 27, Created)
DT 05-JUL-2004 (T-EMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (T-EMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RA Zhang L., Li N., Fan B.;
RA Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
RL EMBL; AY304006; AAQ81751.1; -;
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Prion.
FT NON_TER 1
FT NON_TER 67
SQ SEQUENCE 67 AA; 8176 MW; C4690AD18417A3B2 CRC64;

Query Match 89.5%; Score 77; DB 2; Length 67;
Best Local Similarity 92.9%; Pred. No. 0.00013;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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QY 1 NDWEDRYRENMYR 14
Db 16 NDYEDRYRENMYR 29

RESULT 11
AAQ81751
ID AAQ81751 PRELIMINARY; PRT; 67 AA.
AC AAQ81751;
DT 01-JUN-2004 (TEMBLrel. 27, Created)
DT 01-JUN-2004 (TEMBLrel. 27, Last sequence update)
DT 01-JUN-2004 (TEMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RA Zhang L., Li N., Fan B.;
RT "PrP gene polymorphisms in ovine and bovine in China.";
RL Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY304006; AAQ81751.1; -.
KW Prion.
FT NON_TER 1
FT NON_TER 67
SQ SEQUENCE 67 AA; 8176 MW; C4690AD18417A3B2 CRC64;

Query Match 89.5%; Score 77; DB 2; Length 67;
Best Local Similarity 92.9%; Pred. No. 0.00013;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 16 NDYEDRYRENMYR 29

RESULT 12
AAQ81752
ID AAQ81752 PRELIMINARY; PRT; 67 AA.
AC AAQ81752;
DT 01-JUN-2004 (TEMBLrel. 27, Created)
DT 01-JUN-2004 (TEMBLrel. 27, Last sequence update)
DT 01-JUN-2004 (TEMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RA Zhang L., Li N., Fan B.;
RT "PrP gene polymorphisms in ovine and bovine in China.";
RL Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY304007; AAQ81752.1; -.
KW Prion.
FT NON_TER 1
FT NON_TER 67
SQ SEQUENCE 67 AA; 8161 MW; DE400AD18417A3B2 CRC64;

Query Match 89.5%; Score 77; DB 2; Length 67;
Best Local Similarity 92.9%; Pred. No. 0.00013;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 16 NDYEDRYRENMYR 29

RESULT 13
AAQ81753
ID AAQ81753 PRELIMINARY; PRT; 124 AA.
AC AAQ81753;
DT 01-MAY-2000 (TEMBLrel. 13, Created)
DT 01-MAY-2000 (TEMBLrel. 13, Last sequence update)
DT 01-OCT-2003 (TEMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Varscia variegata variegata (Black and white ruffed lemur).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Strepsirhini; Lemnidae; Varecia.
OX NCBI_TaxID=87289;
RN [1]
RP SEQUENCE FROM N.A.
RA Gilch S., Schatzl H.M.;
RT Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; AF177293; AAD5435.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_Octapep; 3.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 124
SQ SEQUENCE 124 AA; 13436 MW; CC2C8A5A855A7C94 CRC64;

Query Match 89.5%; Score 77; DB 2; Length 124;
Best Local Similarity 92.9%; Pred. No. 0.00026;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 76 NDYEDRYRENMYR 89

RESULT 14
Q6PR45
ID Q6PR45 PRELIMINARY; PRT; 134 AA.
AC Q6PR45;
DT 05-JUL-2004 (TEMBLrel. 27, Created)
DT 05-JUL-2004 (TEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TEMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RA Wang Z., Zhang H.;
RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; AY585240; AAT09129.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_Octapep; 3.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 134
SQ SEQUENCE 134 AA; 15189 MW; 5EFE392B89FD0988 CRC64;

Query Match 89.5%; Score 77; DB 2; Length 134;
Best Local Similarity 92.9%; Pred. No. 0.00029;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14
Db 76 NDYEDRYRENMYR 89

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Db      53 NDYEDRYRENMYR 66

RESULT 15
AAT09129
ID AAT09129 PRELIMINARY; PRT; 134 AA.
AC AAT09129;
DT 12-MAY-2004 (TrEMBLrel. 27, Created)
DT 12-MAY-2004 (TrEMBLrel. 27, Last sequence update)
DE 12-MAY-2004 (TrEMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]_TaxID=9940;
RP SEQUENCE FROM N.A.
RC STRAIN=Blood;
RA Wang Z., Zhang H.;
RT "Cloning and expression of PK-resistant core of PrP from little-fat-
RL tail sheep line, coll.";
BL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY585240; AAT09129.1; -.
KW Prion.
FT NON_TER 1 1
FT NON_TER 134 134
SQ SEQUENCE 134 AA; 15189 MW; 5EFE392B89FD0988 CRC64;

Query Match      89.5%; Score 77; DB 2; Length 134;
Best Local Similarity 92.9%; Pred. No. 0.00029;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      1 NDWEDRYRENMYR 14
       ||:|||||
Db      53 NDYEDRYRENMYR 66

Search completed: October 26, 2004, 15:44:10
Job time : 35.5417 secs

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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:33:38 ; Search time 34.4167 seconds
(without alignments)
145.924 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71

Sequence: 1 CVNITIKQTVTTT 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : A_Geneseq_238sep04.*

1: Geneseq1980s.*

2: Geneseq1990s.*

3: Geneseq2000s.*

4: Geneseq2001s.*

5: Geneseq2002s.*

6: Geneseq2003as.*

7: Geneseq2003bs.*

8: Geneseq2004s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	22	5	AU99430 Human pri
2	60.5	85.2	23	5	AU99432 Mouse pri
3	60.5	85.2	23	5	AU99433 Syrian ha
4	60.5	85.2	25	5	AB81631 Prion mim
5	60.5	85.2	25	7	ABU64309 Transmis
6	60.5	85.2	25	8	AD004596 Prion mim
7	60.5	85.2	31	7	ADD24220 Human pri
8	60.5	85.2	33	2	AA38045 Human pri
9	60.5	85.2	117	5	ABG94357 Modified
10	60.5	85.2	117	5	ABG94357 Modified
11	60.5	85.2	117	7	ADD24196 Modified
12	60.5	85.2	124	5	ABG94340 Mouse mpr
13	60.5	85.2	124	5	ABG80652 Mouse tru
14	60.5	85.2	124	7	ADD24200 mPrPt-EK
15	60.5	85.2	142	2	AAW17686 Prion pro
16	60.5	85.2	142	2	AAW92807 Mouse rpr
17	60.5	85.2	163	7	ADB63859 Human pro
18	60.5	85.2	194	8	ABO58347 Human gen
19	60.5	85.2	200	5	ABG31907 Human pri
20	60.5	85.2	208	3	AA07316 Mouse pri
21	60.5	85.2	208	3	AA07318 Human pri
22	60.5	85.2	208	3	AA07327 Mouse pri
23	60.5	85.2	208	3	AA07329 Human pri
24	60.5	85.2	208	4	AA082110 Hamster p
25	60.5	85.2	208	5	ABG31902 Human pri

26	60.5	85.2	208	5	ABG31904	Abg31904 Chimera-t
27	60.5	85.2	208	5	AAE15601	Aae15601 Hamster p
28	60.5	85.2	208	7	ADJ66133	Adj66133 Mouse pri
29	60.5	85.2	209	5	ABG31905	Abg31905 HChv type
30	60.5	85.2	211	4	ABG30801	Abg30801 Amino aci
31	60.5	85.2	212	4	ABG30802	Abg30802 Amino aci
32	60.5	85.2	225	6	ABR42793	AbR42793 Rat prion
33	60.5	85.2	226	7	ADB85240	ADB85240 Rat prion
34	60.5	85.2	245	4	AB72342	Ab72342 Monkey pr
35	60.5	85.2	245	4	AB72352	Ab72352 Cercopith
36	60.5	85.2	253	2	AA86715	Aar86715 Human pri
37	60.5	85.2	253	2	AAW69660	Aaw69660 Human pri
38	60.5	85.2	253	2	AAW85901	Aaw85901 Human pri
39	60.5	85.2	253	2	AAV07994	Aay07994 Human pri
40	60.5	85.2	253	3	AAV81485	Aay81485 Human pri
41	60.5	85.2	253	3	AA06272	Aab06272 Human prp
42	60.5	85.2	253	3	AA015035	Aab15035 Human pri
43	60.5	85.2	253	4	AA072339	Aab72339 Chimpanze
44	60.5	85.2	253	4	AA072347	Aab72347 Prion pro
45	60.5	85.2	253	4	AA072353	Aab72353 Guereza p

ALIGNMENTS

RESULT 1
AAU99430
ID AAU99430 standard; peptide; 22 AA.
XX AC AAU99430;

DT 07-OCT-2002 (first entry)
DE Human prion protein (3pte) helical segment.

XX I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
KW theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
KW Alzheimer's disease; prion disease; scrapie; BSE;
KW bovine spongiform encephalopathy; Creutzfeld-Jacob disease; CJD;
KW fibrillation; aggregation; neurotropic; neuroprotective; PDB;
KW protein databank code; 3pte; prion protein; human; hPrP.

OS Homo sapiens.

XX WO200241002-A2.

XX 23-MAY-2002.

XX 20-NOV-2001; 2001WO-GB005117.

XX 20-NOV-2000; 2000US-0253695P.

XX 06-DEC-2000; 2000US-0251662P.

XX (ALPH-) ALPHABETA AB.

XX (WHIT/) WHITE M P.

XX White MP, Johansson J;

XX WPI; 2002-519389/55.

XX Identifying compounds that stabilize I-helix of discordant helix in
XX polypeptide, by measuring amount of I-helix in sample containing
XX discordant helix-containing polypeptide in presence and absence of
XX compound.

XX Example 1; Fig 2A; 55pp; English.

XX The present invention relates to a method of identifying a compound that
XX stabilizes an I-helical conformation of a discordant helix in a
XX polypeptide, particularly amyloid beta-peptide (Abeta). The method
XX comprises providing a test sample comprising a polypeptide that contains
XX a discordant helix in the form of an I-helix, contacting the test sample
XX with a test compound and determining the rate of decrease in the amount

CC of I-helix or the amount of I-helix present in the test sample. The
 CC method is useful for identifying a compound that stabilizes an I-helical
 CC conformation of a discordant helix in a polypeptide. Such compounds are
 CC useful for decreasing the rate of formation of theta-strand structures
 CC between at least two discordant helix-containing polypeptides, and for
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99446
 CC represent >9-residue discordant helical segments from various proteins
 CC Sequence 22 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 22;
 Best Local Similarity 93.3%; Pred. No. 0.0021; 0; Mismatches 1; Gaps 1;
 Matches 14; Conservative

QY 1 CVNITIKQ-TVTTT 14
 Db 7 CVNITIKQHTVTTT 21

RESULT 2
 AAU99432
 ID AAU99432 standard; peptide; 23 AA.

AC AAU99432;
 DT 07-OCT-2002 (first entry)
 DE Mouse prion protein (Iag2) helical segment.
 KW I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
 KW theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
 KW Alzheimer's disease; prion disease; scrapie; BSE;
 KW bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;
 KW fibrillation; aggregation; neurotropic; neuroprotective; PDB;
 KW protein databank code; Iag2; prion protein; mouse; mPrP.

OS Mus sp.
 PN WO200241002-A2.
 PD 23-MAY-2002.
 PF 20-NOV-2001; 2001WO-GB005117.
 PR 20-NOV-2000; 2000US-0253695P.
 PR 06-DEC-2000; 2000US-0251662P.

PA (ALPH-) ALPHABETA AB.
 PI (WHIT/) WHITE M P.
 PI White MP, Johansson J;
 DR WPI; 2002-519389/55.

PT Identifying compounds that stabilize I-helix of discordant helix in
 PT polypeptide, by measuring amount of I-helix in sample containing
 PT discordant helix-containing polypeptide in presence and absence of
 PT compound.

PS Example 1; Fig 2A; 55pp; English.

CC The present invention relates to a method of identifying a compound that
 CC stabilizes an I-helical conformation of a discordant helix in a
 CC polypeptide, particularly amyloid beta-peptide (Abeta). The method
 CC comprises providing a test sample comprising a polypeptide that contains
 CC a discordant helix in the form of an I-helix, contacting the test sample
 CC with a test compound and determining the rate of decrease in the amount
 CC of I-helix or the amount of I-helix present in the test sample. The
 CC method is useful for identifying a compound that stabilizes an I-helical
 CC conformation of a discordant helix in a polypeptide. Such compounds are
 CC useful for decreasing the rate of formation of theta-strand structures

CC between at least two discordant helix-containing polypeptides, and for
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99446
 CC represent >9-residue discordant helical segments from various proteins
 CC Sequence 23 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 23;
 Best Local Similarity 93.3%; Pred. No. 0.0022; 0; Mismatches 1; Gaps 1;
 Matches 14; Conservative

QY 1 CVNITIKQ-TVTTT 14
 Db 8 CVNITIKQHTVTTT 22

RESULT 3
 AAU99433
 ID AAU99433 standard; peptide; 23 AA.

AC AAU99433;
 DT 07-OCT-2002 (first entry)
 DE Syrian hamster prion protein (Ib10) helical segment.
 KW I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
 KW theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
 KW Alzheimer's disease; prion disease; scrapie; BSE;
 KW bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;
 KW fibrillation; aggregation; neurotropic; neuroprotective; PDB;
 KW protein databank code; Ib10; prion protein; Syrian hamster; sPrP.

OS Mesocricetus auratus.
 PN WO200241002-A2.
 PD 23-MAY-2002.
 PF 20-NOV-2001; 2001WO-GB005117.
 PR 20-NOV-2000; 2000US-0253695P.
 PR 06-DEC-2000; 2000US-0251662P.

PA (ALPH-) ALPHABETA AB.
 PI (WHIT/) WHITE M P.
 PI White MP, Johansson J;
 DR WPI; 2002-519389/55.

PT Identifying compounds that stabilize I-helix of discordant helix in
 PT polypeptide, by measuring amount of I-helix in sample containing
 PT discordant helix-containing polypeptide in presence and absence of
 PT compound.

PS Example 1; Fig 2A; 55pp; English.

CC The present invention relates to a method of identifying a compound that
 CC stabilizes an I-helical conformation of a discordant helix in a
 CC polypeptide, particularly amyloid beta-peptide (Abeta). The method
 CC comprises providing a test sample comprising a polypeptide that contains
 CC a discordant helix in the form of an I-helix, contacting the test sample
 CC with a test compound and determining the rate of decrease in the amount
 CC of I-helix or the amount of I-helix present in the test sample. The
 CC method is useful for identifying a compound that stabilizes an I-helical
 CC conformation of a discordant helix in a polypeptide. Such compounds are
 CC useful for decreasing the rate of formation of theta-strand structures
 CC between at least two discordant helix-containing polypeptides, and for
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99446

CC represent >9-residue discordant helical segments from various proteins

SQ Sequence 23 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0022;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CUNITIKO-TVTTTT 14
| | | | | | | | | | | | | | | |
DB 8 CUNITIKOHTVTTTT 22

RESULT 4
ABB01631
ID ABB01631 standard; peptide; 25 AA.
XX ABB01631;
XX
DT 25-SEP-2002 (first entry)
DE Prion mimetic peptide SEQ ID NO:3.
XX
KW Prion mimetic peptide; degradation; detection; TSE; infection;
KW transmissible spongiform encephalopathy; prion protein; sterilisation;
KW immunisation; Creutzfeldt-Jacob disease; kuru; fatal familial insomnia;
KW Gerstmann-Strausler-Scheinker syndrome; chronic wasting disease;
KW bovine spongiform encephalopathy; feline spongiform encephalopathy;
KW scrapie; transmissible mink encephalopathy.
XX
OS Synthetic.
XX
XX WO200253723-A2.
XX
XX 11-JUL-2002.
XX
XX 08-JAN-2002; 2002WO-GB0000052.
XX
XX 08-JAN-2001; 2001GB-00000420.
XX
XX 26-FEB-2001; 2001GB-00004696.
XX
XX (MICR-) MICROBIOLOGICAL RES AUTHORITY.
XX
XX Raven NDH;
XX
XX WPI; 2002-557743/59.
XX
XX Inactivating transmissible spongiform encephalopathy (TSE) agent such as
XX Creutzfeldt-Jacob disease, scrapie, kuru or Gerstmann-Strausler-
XX Scheinker syndrome involves exposing agent to thermostable proteolytic
XX enzyme.
XX
XX Example; Page 19; 41pp; English.

XX
XX The present invention describes a method (M1) for inactivating a
XX transmissible spongiform encephalopathy (TSE) agent comprising exposing
XX the TSE agent to a thermostable proteolytic enzyme. Also described: (1) a
XX composition (I) for inactivating a TSE agent, comprising a thermostable
XX proteolytic enzyme; (2) an antibody (II) specific for a prion dimer which
XX does not bind to a prion monomer; and (3) a purified prion dimer. (M1) is
XX useful for inactivating a TSE agent such as a prion. A TSE agent is
XX Gerstmann-Strausler-Scheinker syndrome, kuru, fatal familial insomnia,
XX encephalopathy, scrapie, feline spongiform encephalopathy, chronic
XX wasting disease or transmissible mink encephalopathy. (I) is useful for
XX sterilising material contaminated with the TSE agent. A prion dimer is
XX useful for examining a sample infected with or suspected to be infected
XX by a prion protein, and for detecting prion infectivity, by detecting a
XX prion dimer in the sample. A prion dimer is useful for producing (II), by
XX immunising an animal with a prion dimer, obtaining its extract which
XX contains (II), and isolating (II) from the extract. The method comprises
XX obtaining an antibody preparation containing antibodies which bind a
XX prion dimer, and removing (II) from the preparation. (M1) and (I) are

CC useful for inactivating TSE agents in potentially contaminated clinical
CC waste and culled animal material. (M1) is useful for sterilising larger
CC surface areas of apparatus, operating tables or even walls of rooms. The
CC present sequence represents a prion mimetic peptide which is used in an
CC example from the present invention in the preparation of antibodies
CC including dimer preferential antibodies

XX
XX SQ Sequence 25 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 25;
Best Local Similarity 93.3%; Pred. No. 0.0024;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CUNITIKO-TVTTTT 14
| | | | | | | | | | | | | | | |
DB 1 CUNITIKOHTVTTTT 15

RESULT 5
ABU64309
ID ABU64309 standard; peptide; 25 AA.
XX ABU64309;
XX
XX 11-MAR-2004 (first entry)
XX
XX Transmissible spongiform encephalopathy prion protein fragment #7.
XX
XX Transmissible spongiform encephalopathy; TSE; antibody; dimer;
XX antiinflammatory; neuroprotective; sedative.
XX
XX Unidentified.
XX
XX WO2003080665-A2.
XX
XX 02-OCT-2003.
XX
XX 20-MAR-2003; 2003WO-GB001295.
XX
XX 20-MAR-2002; 2002GB-00006584.
XX
XX 11-JUL-2002; 2002GB-00016098.
XX
XX (MICR-) MICROBIOLOGICAL RES AUTHORITY.
XX
XX Raven NDH, Sutton JM, Murdoch H;
XX
XX WPI; 2003-779246/73.
XX
XX Treating transmissible spongiform encephalopathy (TSE) infection
XX comprises administering an antibody that binds to a dimer of a prion
XX protein.
XX
XX Claim 5; Page 40; 40pp; English.

XX
XX The present invention relates to a method of treating transmissible
XX spongiform encephalopathy (TSE) infection, comprising administering an
XX antibody that binds to a dimer of a prion protein. The methods and
XX compositions are useful for treating TSE, Creutzfeldt-Jacob disease,
XX variant Creutzfeldt-Jacob disease, Kuru, fatal familial insomnia,
XX Gerstmann-Strausler-Scheinker syndrome, bovine spongiform
XX encephalopathy, scrapie, feline spongiform encephalopathy, chronic
XX wasting disease and transmissible mink encephalopathy. Antigens are
XX useful for the manufacture of a medicament for stimulating antibody
XX production. The present sequence is a peptide fragment of a TSE prion
XX protein.
XX
XX SQ Sequence 25 AA;

Query Match 85.2%; Score 60.5; DB 7; Length 25;
Best Local Similarity 93.3%; Pred. No. 0.0024;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CUNITIKO-TVTTTT 14

XX	Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
XX	PSB; subfragment; antibody; treatment; spongiform encephalopathy;
KW	human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
KW	immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
KW	resistance.
XX	
OS	Synthetic.
XX	
PH	Key
FT	Location/Qualifiers
FT	Misc-difference 1
FT	/note= "One or more residues or may be absent"
FT	Misc-difference 2
FT	/note= "May be absent"
FT	Misc-difference 3
FT	/note= "May be absent"
FT	Misc-difference 4
FT	/note= "May be absent"
FT	Misc-difference 5
FT	/note= "May be absent"
FT	Misc-difference 29
FT	/note= "May be absent"
FT	Misc-difference 30
FT	/note= "May be absent"
FT	Misc-difference 31
FT	/note= "May be absent"
FT	Misc-difference 32
FT	/note= "May be absent"
FT	Misc-difference 33
FT	/note= "One or more residue or may be absent"
XX	
WO	9311155-A1.
XX	
PN	10-JUN-1993.
PD	
XX	
PP	03-DEC-1992; 92WO-GB002246.
PP	
PR	03-DEC-1991; 91GB-00025747.
PR	10-JUL-1992; 92GB-00014663.
XX	
PA	(PROT-) PROTEUS MOLECULAR DESIGN LTD.
XX	
PI	Fishleigh RV, Robson B, Mee RP;
PI	
DR	WPI, 1993-196994/24.
XX	
PT	New polypeptide(s) contg. antigenic site of prion. protein - useful for
PT	treatment and diagnosis of mammalian encephalopathies e.g. Creutzfeldt-
PT	Jakob disease and kuru.
XX	
XX	Claim 28; Page 74; 82pp; English.
XX	
CC	The sequences given in AAR38041-48 represent polypeptides which are
CC	derived from an antigenic site, region F, of a prion protein. Prion
CC	proteins comprise six regions of interest (A-F), and two related frame
CC	shift peptides sequences caused by a repeating section in region E having
CC	a nucleic acid coding sequence frame shift mutation of 11 (fSa) or -1
CC	(fSB). These peptides (see also AAR38041-48) and antibodies raised
CC	against these may be used to treat or prevent spongiform encephalopathy
CC	in humans, sheep or cattle. They can be used to block cellular binding
CC	and aggregation of prion proteins and to stimulate the mammalian immune
CC	system. These peptides may be used to distinguish between the normal form
CC	of prion protein (PrPc) and the scrapie-associated form (PrPsc). These
CC	peptides may include rare or synthetic amino acids or a ratio- inverse
CC	peptide modification to improve resistance to enzymatic degradation.
CC	(Updated on 25-MAR-2003 to correct PN field.)
XX	
SQ	Sequence 33 AA;

QY 1 CVNITIKQ-TVTTTT 14
DB 7 CVNITIKQHTVTTTT 21

RESULT 9
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
XX ABG94357;
XX
XX 10-DEC-2002 (first entry)
XX
XX Modified human prion protein fragment.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cystostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
XX Homo sapiens.
OS
XX WO200256905-A2.
PN
XX 25-JUL-2002.
PD
XX
XX 21-JAN-2002; 2002WO-IB000166.
PF
XX
XX 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0286549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
PI Piossek C;
PI
XX
XX WPI, 2002-627351/67.
DR
XX
XX Molecular antigen array used in the production of vaccines for infectious
PT diseases.
PT
XX
XX Disclosure; Page 441; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is anyloid beta peptide
CC (Abeta1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the antigen or antigenic determinant and the
CC scaffold interact through the association to form an ordered and
CC repetitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant beta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention
XX
XX Sequence 117 AA;
XX SQ

Query Match 85.2%; Score 60.5; DB 2; Length 33;
Best Local Similarity 93.3%; Pred. No. 0.0032;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

CC	determinant, where the second attachment site is capable of association
CC	through at least one non-peptide bond to the first attachment site; and
CC	where the antigen or antigenic determinant and the scaffold interact
CC	through the association to form an ordered and repetitive antigen array.
CC	Also included is a process for producing a non-naturally occurring
CC	ordered and repetitive antigen array. The composition is used in
CC	immunisation and as a vaccine for diseases such as influenza, graft
CC	versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
CC	respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
CC	acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
CC	systemic lupus erythematosus, inflammatory immune diseases, myasthenia
CC	gravis, immunoproliferative disease lymphadenopathy,
CC	angiomonoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
CC	rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
CC	osteoporosis and infectious diseases. The present sequence is a modified
CC	antigen for use in the array of the invention. The antigen is modified to
CC	posses a cleavage site (enterokinase or factor Xa) and a Cysteine-
CC	containing N- or C-terminal linker peptide which serves as the attachment
CC	point to a virus like particle or bacterial protein (the scaffold
CC	protein)
XX	
SQ	Sequence 117 AA;
	Query Match 85.2%; Score 60.5; DB 5; Length 117;
	Best Local Similarity 93.3%; Pred. No. 0.012;
	Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
Oy	1 CVNLTIKQ-TVTTTT 14
Dd	58 CVNLTIKQHVTITT 72
RESULT 11	
ID	ADD24196
ID	ADD24196 standard; protein; 117 AA.
AC	ADD24196;
DT	15-JAN-2004 (first entry)
DE	Modified human prion protein amino acid sequence.
XX	vaccine composition; virus-like particle; core particle;
KW	first attachment site; antigen; antigenic determinant; prion protein;
KW	PfP; PfP peptide; vaccine; neuroprotective; antiinflammatory;
KW	prion disease; Bovine Spongiform Encephalopathy; BSE;
KW	Creutzfeldt-Jakob Disease; prion; mutant; mutein.
XX	
OS	Synthetic.
OS	prion.
PN	WO2003059386-A2.
PD	24-JUL-2003.
PF	17-JAN-2003; 2003WO-EP000460.

XX	18-JAN-2002; 2002US-00050902.
XX	PR
XX	21-JAN-2002; 2002WO-IB000166.
XX	PR
XX	08-JUL-2002; 2002US-0393725P.
XX	PR
XX	18-JUL-2002; 2002US-0396590P.
XX	PR
XX	(CYTO-) CYTOS BIOTECHNOLOGY AG.
XX	PA
XX	PA
XX	Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX	PR
XX	WPI; 2003-598483/56.
XX	DR
XX	A vaccine composition for preventing or treating prion diseases (e.g.
XX	PT
XX	Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX	PT
XX	phage) and at least one prion protein or peptide bound to the virus-like
XX	PT
XX	particle.
XX	PT
XX	XX

PS Disclosure; SEQ ID NO 89; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-
CC like or a core particle with at least one first attachment site and at
CC least one antigen or antigenic determinant that is a prion protein (PrP)
CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
CC being bound to the virus-like or core particle. The vaccine of the
CC invention may have neuroprotective or antiinflammatory activity. The
CC composition is useful as a medicament or in manufacturing a medicament
CC for the treatment or prevention of prion diseases. The prion diseases may
CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
CC Disease. The present sequence is the amino acid sequence of a modified
CC human prion protein (PrP) which may be used during the creation of the
CC vaccine composition of the invention.

XX Sequence 117 AA;

SQ Query Match 85.2%; Score 60.5; DB 7; Length 117;

Best Local Similarity 93.3%; Pred. No. 0.012; Mismatches 0; Indels 1; Gaps 1;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

Db 58 CWNITIKQHVTTTT 72

RESULT 12

ABG94340

ID ABG94340 standard; protein; 124 AA.

XX AC ABG94340;

XX 10-DEC-2002 (first entry)

XX Mouse mPrP protein.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.

XX Mus sp.

XX WO200256905-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002WO-IB000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326998P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner P, Sebbel P;

XX Piossek C;

XX WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious
XX diseases.

XX Disclosure; Page 438; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment

CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (Abetal-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the antigen or antigenic determinant and the
CC scaffold interact through the association to form an ordered and
CC repetitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant beta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention

SQ Sequence 124 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 124;

Best Local Similarity 93.3%; Pred. No. 0.013; Mismatches 0; Indels 1; Gaps 1;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

Db 59 CWNITIKQHVTTTT 73

RESULT 13

ABG80652

ID ABG80652 standard; protein; 124 AA.

XX AC ABG80652;

XX 29-NOV-2002 (first entry)

XX Mouse truncated prion protein with C terminal cysteine containing linker.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; muten;
KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;
KW adult respiratory distress syndrome; ARDS; Crohn's disease;
KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
KW Grave's disease; systemic lupus erythematosus; osteoporosis;
KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
KW rheumatoid arthritis; diabetes; infectious disease; factor Xa,
KW enterokinase; cysteine-containing linker.

XX Mus sp.

XX Synthetic.

XX WO200256907-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326998P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX (MAUR/) MAURER P.

XX (LECH/) LECHNER P.

XX (ORTM/) ORTMANN R.

XX (LUEO/) LUEOEND R.

XX (STAU/) STAUFENBIEL M.

XX (FREY/) FREY P.

PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;
 DR WPI; 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious
 XX diseases.

PT Example 7; Page 415; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC an amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igs-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

XX Sequence 124 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 124;
 Best Local Similarity 93.3%; Pred. No. 0.013;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CVNITIKQ-TVTTT 14
 ||||| |||||
 Db 59 CVNITIKQHTVTTT 73

RESULT 14

ID ADD24200 standard; protein; 124 AA.

XX ADD24200;

XX 15-JAN-2004 (first entry)

DE mPrPt-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc*.

XX Unidentified.

OS prion.

XX WO2003059386-A2.

XX

PD 24-JUL-2003.

XX 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-00050902.

PR 21-JAN-2002; 2002WO-IB000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CVTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;

XX WPI; 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.

PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

PT phage), and at least one prion protein or peptide bound to the virus-like

PT particle.

XX Example 13; SEQ ID NO 93; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
 CC which was used during the exemplification of the invention.

XX Sequence 124 AA;

Query Match 85.2%; Score 60.5; DB 7; Length 124;
 Best Local Similarity 93.3%; Pred. No. 0.013;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CVNITIKQ-TVTTT 14
 ||||| |||||
 Db 59 CVNITIKQHTVTTT 73

RESULT 15

ID AAW17686

XX AAW17686 standard; peptide; 142 AA.

XX AAW17686;

DT 14-JAN-1998 (first entry)

DE Prion protein peptide Hu 90-231.

XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KW scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KW Creutzfeldt-Jakob disease; kuru; GSS; FRI; fatal familial insomnia;
 KW Gerstmann-Straussler-Scheinker disease; hamster; human.

XX Homo sapiens.

OS WO9716728-A1.

XX 09-MAY-1997.

XX 28-OCT-1996; 96WO-US017462.

XX 02-NOV-1995; 95US-00556823.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Kaneko K, Cohen FE;
 XX WPI; 1997-272248/24.
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX Claim 11; Page 7-38; 50pp; English.
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 XX Sequence 142 AA;
 SQ Query Match 85.2%; Score 60.5; DB 2; Length 142;
 Best Local Similarity 93.3%; Pred. No. 0.015;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CVNITIKQ-TVVTTT 14
 DB 90 CVNITIKQHTVTTT 104

Search completed: October 26, 2004, 15:42:11
 Job time : 36.4167 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:39:39 ; Search time 34.4167 Seconds
(without alignments)
131.698 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71

Sequence: 1 CVNITIKQTVTTT 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1364641 seqs, 323758627 residues

Total number of hits satisfying chosen parameters: 1364641

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	60.5	85.2	22	9	US-09-988-842-8
2	60.5	85.2	23	9	US-09-988-842-10
3	60.5	85.2	23	9	US-09-988-842-11
4	60.5	85.2	25	15	US-10-614-370-3
5	60.5	85.2	33	14	US-10-116-061-36
6	60.5	85.2	117	14	US-10-050-902-348
7	60.5	85.2	117	14	US-10-050-898-348
8	60.5	85.2	117	14	US-10-346-190-89
9	60.5	85.2	124	14	US-10-050-902-324
10	60.5	85.2	124	14	US-10-050-898-324
11	60.5	85.2	124	14	US-10-346-190-93
12	60.5	85.2	141	16	US-10-612-356A-1
13	60.5	85.2	162	9	US-09-745-003-10

14	60.5	85.2	163	9	US-09-745-003-11	Sequence 11, Appl
15	60.5	85.2	163	14	US-10-104-047-2013	Sequence 2013, Ap
16	60.5	85.2	164	9	US-09-745-003-12	Sequence 12, Appl
17	60.5	85.2	194	14	US-10-023-386-11981	Sequence 11981, A
18	60.5	85.2	200	16	US-10-470-848-10	Sequence 10, Appl
19	60.5	85.2	208	9	US-09-823-494-18	Sequence 18, Appl
20	60.5	85.2	208	16	US-10-470-848-3	Sequence 3, Appl
21	60.5	85.2	208	17	US-10-745-393-1	Sequence 1, Appl
22	60.5	85.2	209	16	US-10-470-848-6	Sequence 6, Appl
23	60.5	85.2	209	16	US-10-470-848-7	Sequence 7, Appl
24	60.5	85.2	225	14	US-10-301-488A-25	Sequence 25, Appl
25	60.5	85.2	225	15	US-10-301-448-25	Sequence 25, Appl
26	60.5	85.2	226	14	US-10-205-194-121	Sequence 121, App
27	60.5	85.2	245	14	US-10-304-630-5	Sequence 5, Appl
28	60.5	85.2	245	14	US-10-304-630-15	Sequence 15, Appl
29	60.5	85.2	252	14	US-10-304-630-13	Sequence 13, Appl
30	60.5	85.2	252	14	US-10-304-630-17	Sequence 17, Appl
31	60.5	85.2	253	9	US-09-823-494-20	Sequence 20, Appl
32	60.5	85.2	253	9	US-09-823-494-3	Sequence 3, Appl
33	60.5	85.2	253	9	US-09-919-172-57	Sequence 57, Appl
34	60.5	85.2	253	9	US-09-943-906-2	Sequence 2, Appl
35	60.5	85.2	253	14	US-10-304-630-1	Sequence 1, Appl
36	60.5	85.2	253	14	US-10-304-630-2	Sequence 2, Appl
37	60.5	85.2	253	14	US-10-304-630-3	Sequence 3, Appl
38	60.5	85.2	253	14	US-10-304-630-4	Sequence 4, Appl
39	60.5	85.2	253	14	US-10-304-630-7	Sequence 7, Appl
40	60.5	85.2	253	14	US-10-304-630-8	Sequence 8, Appl
41	60.5	85.2	253	14	US-10-304-630-9	Sequence 9, Appl
42	60.5	85.2	253	14	US-10-304-630-10	Sequence 10, Appl
43	60.5	85.2	253	14	US-10-304-630-11	Sequence 11, Appl
44	60.5	85.2	253	14	US-10-304-630-12	Sequence 12, Appl
45	60.5	85.2	253	14	US-10-304-630-14	Sequence 14, Appl

ALIGNMENTS

RESULT 1

US-09-988-842-8

; Sequence 8, Application US/09988842

; Patent No. US20020143105A1

; GENERAL INFORMATION:

; APPLICANT: Johansson, Jan

; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION

; FILE REFERENCE: 12125-002001

; CURRENT APPLICATION NUMBER: US/09/988,842

; PRIOR FILING DATE: 2001-11-19

; PRIOR APPLICATION NUMBER: US 60/251,662

; PRIOR FILING DATE: 2000-12-06

; PRIOR APPLICATION NUMBER: US 60/253,695

; NUMBER OF SEQ ID NOS: 26

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 8

; LENGTH: 22

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetically generated peptide

US-09-988-842-8

Query Match 85.2%; Score 60.5; DB 9; Length 22;
Best Local Similarity 93.3%; Pred. No. 0.0025;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Ov 1 CVNITIKQ-TVTTT 14
|||||
Db 7 CVNITIKQTVTTT 21
|||||

RESULT 2

US-09-988-842-10

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; Sequence 10, Application US/0998842
; Patent No. US20020143105A1
; GENERAL INFORMATION:
; APPLICANT: Johansson, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; FILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-10
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Query Match      85.2%; Score 60.5; DB 9; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0026;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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QY      1 C V N I T I K Q - T V T T T T 14
          ||||| |||||
Db       8 C V N I T I K Q H T V T T T 22
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```
RESULT 3
US-09-988-842-11
; Sequence 11, Application US/0998842
; Patent No. US20020143105A1
; GENERAL INFORMATION:
; APPLICANT: Johansson, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; FILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-11
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Query Match      85.2%; Score 60.5; DB 9; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0026;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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QY      1 C V N I T I K Q - T V T T T T 14
          ||||| |||||
Db       8 C V N I T I K Q H T V T T T 22
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RESULT 4
US-10-614-370-3
; Sequence 3, Application US/10614370
; Publication No. US20040091474A1
; GENERAL INFORMATION:
; APPLICANT: Raven, Neil David Hammond
; APPLICANT: Sutton, John Mark
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; TITLE OF INVENTION: Degradation and Detection of TSE Infectivity
; FILE REFERENCE: 1581.0990001
; CURRENT APPLICATION NUMBER: US/10/614,370
; CURRENT FILING DATE: 2003-07-08
; PRIOR APPLICATION NUMBER: GB 0104696.0
; PRIOR FILING DATE: 2001-02-26
; PRIOR APPLICATION NUMBER: GB 0100420.9
; PRIOR FILING DATE: 2001-01-08
; PRIOR APPLICATION NUMBER: GB 0216146.1
; PRIOR FILING DATE: 2003-07-11
; PRIOR APPLICATION NUMBER: PCT/GB02/00052
; PRIOR FILING DATE: 2002-01-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 25
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-614-370-3
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Query Match      85.2%; Score 60.5; DB 15; Length 25;
Best Local Similarity 93.3%; Pred. No. 0.0029;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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QY      1 C V N I T I K Q - T V T T T T 14
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Db       1 C V N I T I K Q H T V T T T 15
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RESULT 5
US-10-116-061-36
; Sequence 36, Application US/10116061
; Publication No. US20030199013A1
; GENERAL INFORMATION:
; APPLICANT: Fishleigh, Robert V.
; APPLICANT: Robson, Barry
; APPLICANT: Moser, Roger E.
; TITLE OF INVENTION: Fragments of Prion Proteins
; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/116,061
; FILING DATE: 05-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,701B
; FILING DATE: 02-JUN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Panucci, Allan A.
; REGISTRATION NUMBER: 30,256
; REFERENCE/DOCKET NUMBER: 8080-007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 33 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: /label= X
; /note= "X may be absent or present independently
; of Y and denotes one or amino acid(s)"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 33
; OTHER INFORMATION: /label= Y
; /note= "Y may be absent or present independently
; of X and denotes one or more amino acid(s)"
; SEQUENCE DESCRIPTION: SEQ ID NO: 36:
US-10-116-061-36

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Query Match      85.2%; Score 60.5; DB 14; Length 33;
Best Local Similarity 93.3%; Pred. No. 0.0039;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CWNITIKQ-TVTTTT 14
Db 7 CWNITIKQHTVTTTT 21

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RESULT 6
US-10-050-902-348
; Sequence 348, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Tisbet, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Piossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348

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Query Match      85.2%; Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.016;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CWNITIKQ-TVTTTT 14
Db 58 CWNITIKQHTVTTTT 72

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RESULT 7
US-10-050-898-348
; Sequence 348, Application US/10050898
; Publication No. US2003017511A1

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; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tisbet, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Piossek, Christine
; APPLICANT: Ortmeck, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

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```

Query Match      85.2%; Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.016;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CWNITIKQ-TVTTTT 14
Db 58 CWNITIKQHTVTTTT 72

```

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RESULT 8
US-10-346-190-89
; Sequence 89, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pellicoli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 89
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:

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; OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match      85.2%; Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.016;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY      1 CVNITIKQ-TVTTTT 14
      ||||| ||||| |||||
Db      58 CVNITIKQHTVTTTT 72

RESULT 9
US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Plossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Protein sequence of mPrPt
US-10-050-898-324

Query Match      85.2%; Score 60.5; DB 14; Length 124;
Best Local Similarity 93.3%; Pred. No. 0.017;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY      1 CVNITIKQ-TVTTTT 14
      ||||| ||||| |||||
Db      59 CVNITIKQHTVTTTT 73

RESULT 11
US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 93
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPt
US-10-346-190-93

Query Match      85.2%; Score 60.5; DB 14; Length 124;
Best Local Similarity 93.3%; Pred. No. 0.017;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY      1 CVNITIKQ-TVTTTT 14
      ||||| ||||| |||||
Db      59 CVNITIKQHTVTTTT 73

RESULT 12
US-10-612-356A-1

; OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match      85.2%; Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.016;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY      1 CVNITIKQ-TVTTTT 14
      ||||| ||||| |||||
Db      58 CVNITIKQHTVTTTT 72

RESULT 10
US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US2003017511A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Plossek, Christine
; APPLICANT: Ortman, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
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; Sequence 1, Application US/10612356A
; Publication No. US20040143093A1
; GENERAL INFORMATION:
; APPLICANT: Zahn, Ralph
; TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
; FILE REFERENCE: as pathogenic/infectious proteins, and their use
; CURRENT APPLICATION NUMBER: US/10/612,356A
; CURRENT FILING DATE: 2003-07-02
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENGTH: 141
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match      85.2%; Score 60.5; DB 16; Length 141;
Best Local Similarity 93.3%; Pred. No. 0.019; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 1;

Qy      1  CWNITIKO-TVTTTT 14
Db      90  CWNIIKQHTVTTTT 104

RESULT 13
US-09-745-003-10
; Sequence 10, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PrP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 162
; TYPE: PRT
; ORGANISM: primate
US-09-745-003-10

Query Match      85.2%; Score 60.5; DB 9; Length 162;
Best Local Similarity 93.3%; Pred. No. 0.022; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 1;

Qy      1  CWNITIKO-TVTTTT 14
Db      88  CWNIIKQHTVTTTT 102

RESULT 14
US-09-745-003-11
; Sequence 11, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PrP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Hamster sp.
US-09-745-003-11

Query Match      85.2%; Score 60.5; DB 9; Length 163;
Best Local Similarity 93.3%; Pred. No. 0.023; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 1;

Qy      1  CWNITIKO-TVTTTT 14
Db      89  CWNIIKQHTVTTTT 103

Search completed: October 26, 2004, 15:46:48
Job time : 35.4167 secs
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:36:59 ; Search time 8.16667 Seconds
(without alignments)
164.943 Million cell updates/sec

Title: US-09-603-832-6
Perfect score: 71
Sequence: 1 CWNITIKQTVTTTT 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_79.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	226	A53892	prion-related prot
2	60.5	85.2	232	S71041	major prion protei
3	60.5	85.2	239	S53633	major prion protei
4	60.5	85.2	241	S71048	major prion protei
5	60.5	85.2	241	S71056	major prion protei
6	60.5	85.2	245	S53627	major prion protei
7	60.5	85.2	245	S71045	major prion protei
8	60.5	85.2	252	S53634	major prion protei
9	60.5	85.2	252	S53631	major prion protei
10	60.5	85.2	253	UJHU	major prion protei
11	60.5	85.2	253	S53624	major prion protei
12	60.5	85.2	253	S53623	major prion protei
13	60.5	85.2	253	S53620	major prion protei
14	60.5	85.2	253	S53625	major prion protei
15	60.5	85.2	253	I84423	major prion protei
16	60.5	85.2	253	S71055	major prion protei
17	60.5	85.2	253	S53617	major prion protei
18	60.5	85.2	253	S53635	prion protein - si
19	60.5	85.2	253	S53614	major prion protei
20	60.5	85.2	253	I37032	major prion protei
21	60.5	85.2	253	I61847	major prion protei
22	60.5	85.2	253	S53616	major prion protei
23	60.5	85.2	253	S53618	major prion protei
24	60.5	85.2	253	S53619	major prion PrP-Sc
25	60.5	85.2	254	UJHYIH	major prion PrP-Sc
26	60.5	85.2	254	B34759	prion protein - go
27	60.5	85.2	254	A34759	prion protein - Ch
28	60.5	85.2	254	A23544	major prion protei
29	60.5	85.2	257	A23545	major prion PrP27-

RESULT 1

A53892
Prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-232 <L1A>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA1947.1; PID:G20639
C:Superfamily: major prion protein

Query Match 85.2%; Score 60.5; DB 2; Length 226;
Best Local Similarity 93.3%; Pred. No. 0.0038;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 CWNITIKQTVTTTT 14
Db 151 CWNITIKQTVTTTT 165

RESULT 2

S71041
Major prion protein - black-handed spider monkey (fragment)
C:Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1998 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71041; S53630
R:Schatzli, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G474
R:Schatzli, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Frusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-231 <SCW>
A:Cross-references: EMBL:U08309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 232;

Best Local Similarity 93.3%; Pred. No. 0.0039; 0; Mismatches 0; Indels 1; Gaps 1;
Matches 14; Conservative

QY 1 CVNITIKQ-TVTTTT 14
DB 163 CVNITIKQHTVTTTT 177

RESULT 3

major prion protein - douroucouli (fragment)
C:Species: Aotus trivirgatus (douroucouli, night monkey, owl monkey)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
A:Accession: S53633; S71042
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: UNIPROT:P40245; EMBL:U08293
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 239;

Best Local Similarity 93.3%; Pred. No. 0.0041; 0; Mismatches 0; Indels 1; Gaps 1;
Matches 14; Conservative

QY 1 CVNITIKQ-TVTTTT 14
DB 171 CVNITIKQHTVTTTT 185

RESULT 4

major prion protein - Callicebus moloch (fragment)
C:Species: Callicebus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
A:Accession: S71048; S53632
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 241;

Best Local Similarity 93.3%; Pred. No. 0.0041; 0; Mismatches 0; Indels 1; Gaps 1;
Matches 14; Conservative

QY 1 CVNITIKQ-TVTTTT 14
DB 171 CVNITIKQHTVTTTT 185

Db 172 CVNITIKQHTVTTTT 186

RESULT 5

major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
A:Accession: S71056; S53621
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g474364
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08303
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 241;

Best Local Similarity 93.3%; Pred. No. 0.0041; 0; Mismatches 0; Indels 1; Gaps 1;
Matches 14; Conservative

QY 1 CVNITIKQ-TVTTTT 14
DB 172 CVNITIKQHTVTTTT 186

RESULT 6

major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
A:Accession: S53627; S71043
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 245;

Best Local Similarity 93.3%; Pred. No. 0.0042; 0; Mismatches 0; Indels 1; Gaps 1;
Matches 14; Conservative

QY 1 CVNITIKQ-TVTTTT 14
DB 171 CVNITIKQHTVTTTT 185

RESULT 7

S71045

major prion protein - Cercopithecus diana
 C:Species: Cercopithecus diana
 C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53628
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71045
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: UNIPROT:P40250; EMBL:U08292; PIDN:AAC50081.1; PID:G47434
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53628
 A:Status: nucleic acid sequence not shown
 A:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 245;
 Best Local Similarity 93.3%; Pred. No. 0.0043;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 DB 171 CWNITIKQHTVTTT 185

RESULT 8
 S53634
 major prion protein - common marmoset
 C:Species: Callithrix jacchus (common marmoset)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53634; PIDN:AAC50092.1; PID:G474367
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53634
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>
 A:Cross-references: UNIPROT:P40247; EMBL:U08304
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71047
 A:Molecule type: DNA
 A:Residues: 1-209, 'R', 211-252 <SCH>
 A:Cross-references: EMBL:U08304; NID:G474366; PIDN:AAC50092.1; PID:G474367
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 252;
 Best Local Similarity 93.3%; Pred. No. 0.0043;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 DB 178 CWNITIKQHTVTTT 192

RESULT 9
 S53631
 major prion protein - brown capuchin
 C:Species: Cebus apella (brown capuchin, black-capped capuchin)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53631; S71044
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53631
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>
 A:Cross-references: UNIPROT:P40249; EMBL:U08295
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71044
 A:Molecule type: DNA
 A:Residues: 1-209, 'E', 211-252 <SCW>
 A:Cross-references: EMBL:U08295; NID:G474348; PIDN:AAC50084.1; PID:G474349
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 252;
 Best Local Similarity 93.3%; Pred. No. 0.0043;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 |||||
 DB 178 CWNITIKQHTVTTT 192

RESULT 10

UJHU
 major prion protein precursor - human
 N:Alternate names: 11K amyloid protein; 27-30Kialoglycoprotein; PrP 27-30; PrP 33-35C
 C:Species: Homo sapiens (man)
 C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
 C:Accession: A24173; A40372; A05017; S14078; I54597; I58135; I59184; I79633; I7
 R:Kretschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; D
 DNA 5, 315-324, 1986
 A:Title: Molecular cloning of a human prion protein cDNA.
 A:Reference number: A24173; MUID:86300093; PMID:3755672
 A:Accession: A24173
 A:Molecule type: mRNA
 A:Residues: 1-253 <KRE>
 A:Cross-references: UNIPROT:P04156; GB:M13899; NID:G190467; PIDN:AAA60182.1; PID:G19046
 R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.
 Am. J. Hum. Genet. 49, 320-329, 1991
 A:Title: Genomic structure of the human prion protein gene.
 A:Reference number: A40372; MUID:91328137; PMID:1678248
 A:Accession: A40372
 A:Status: not compared with conceptual translation
 A:Molecule type: DNA
 A:Residues: 1-80, 89-253 <PUC>
 A:Cross-references: GB:X83416; NID:G747846; PIDN:CAA58442.1; PID:G747847
 A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not
 R:Liao, Y.C.; Labo, R.V.; Clawson, G.A.; Smuckler, E.A.
 Science 233, 364-367, 1986
 A:Reference number: A05017; MUID:86261778; PMID:3014653
 A:Accession: A05017
 A:Molecule type: mRNA
 A:Residues: 8-117, 119-253 <LIA>
 A:Cross-references: GB:D00015; NID:G220015; PIDN:BAA00011.1; PID:G220016; GB:M13667; NI
 R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Parlo
 EMBO J. 10, 513-519, 1991
 A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) 1

A:Reference number: S14078; MUID:91160504; PMID:1672107
 A:Accession: S14078
 A:Molecule type: protein
 A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
 R:Diédreich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
 Hum. Mol. Genet. 1, 443-444, 1992
 A:Title: Deletion in the prion protein gene in a demented patient.
 A:Reference number: I54322; MUID:93250789; PMID:1363802
 A:Accession: I54322
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA

C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0043;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
| | | | | | | | | | | | | | | |
Db 179 CWNITIKQHTVTTTT 193

RESULT 12
SS3623
major prion protein - crab-eating macaque
C;Species: Macaca fascicularis (Crab-eating macaque)
C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C;Accession: SS3623; S71052
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A;Title: Prion protein gene variation among primates.
A;Reference number: SS3614; MUID:95139066; PMID:7837269
A;Accession: SS3623
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-253 <SCH>
A;Cross-references: EMBL:U08298
R;Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71052
A;Molecule type: DNA
A;Residues: 1-210, 'E', 212-253 <SCH>
A;Cross-references: EMBL:U08298; NID:G474354; PIDN:AACS00807.1; PID:G474355
C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0043;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
| | | | | | | | | | | | | | | |
Db 179 CWNITIKQHTVTTTT 193

RESULT 13
SS3620
major prion protein - hamadryas baboon
C;Species: Papio hamadryas (hamadryas baboon)
C;Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C;Accession: SS3620; S71058
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A;Title: Prion protein gene variation among primates.
A;Reference number: SS3614; MUID:95139066; PMID:7837269
A;Accession: SS3620
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-253 <SCH>
A;Cross-references: EMBL:U08294
R;Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71058
A;Molecule type: DNA
A;Residues: 1-210, 'E', 212-253 <SCH>
A;Cross-references: EMBL:U08294; NID:G474346; PIDN:AACS0083.1; PID:G474347
C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0043;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 ||||| |||||
 Db 179 CWNITIKQHTVTTTT 193

RESULT 14

S53625

major prion protein - Japanese macaque

C:Species: Macaca fuscata (Japanese macaque)

C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S53625; S71053

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53625

A>Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08301

R:Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71053

A:Molecule type: DNA

A:Residues: 1-210, 'E', 212-253 <SCW>

A:Cross-references: EMBL:U08301; NID:9474360; PIDN:AAC50090.1; PID:9474361

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;

Best Local Similarity 93.3%; Pred. No. 0.0043;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 ||||| |||||
 Db 179 CWNITIKQHTVTTTT 193

RESULT 15

I84423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C>Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: I84423; S53622; S71054

R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: I38907; MUID:95083661; PMID:7791600

A:Accession: I84423

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:9595850; PIDN:AAA68635.1; PID:95958

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A>Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCW>

A:Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;

Best Local Similarity 93.3%; Pred. No. 0.0043;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
 ||||| |||||
 Db 179 CWNITIKQHTVTTTT 193

Search completed: October 26, 2004, 15:44:43

Job time: 8.16667 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:34:24 ; Search time 33.5417 Seconds
(without alignments)
240.156 Million cell updates/sec

Title: US-09-603-832-6
Perfect score: 71
Sequence: 1 CWNITIKQTVTTTT 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Uniprot_02.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	145	2 Q78EH4	Q78EH4 mesocricetu
2	60.5	85.2	212	2 Q811W5	Q811W5 vesicocricetu
3	60.5	85.2	220	2 Q866W7	Q866W7 ochotona pr
4	60.5	85.2	232	1 PRIO_ATEGE	P40246 ateles geof
5	60.5	85.2	238	1 PRIO_CERAT	Q95145 cercocebus
6	60.5	85.2	238	1 PRIO_THEGE	Q95270 theropithec
7	60.5	85.2	238	2 Q86XR1	Q86XR1 homo sapien
8	60.5	85.2	239	1 PRIO_AOTTR	P40245 aotus trivi
9	60.5	85.2	240	2 Q8VHV4	Q8VHV4 microtus ag
10	60.5	85.2	241	1 PRIO_CALMO	P40248 callicebus
11	60.5	85.2	241	1 PRIO_MANSF	P40255 mandrillus
12	60.5	85.2	243	2 P97895	P97895 mesocricetu
13	60.5	85.2	243	1 PRIO_CERAE	P40250 cercopithec
14	60.5	85.2	246	1 PRIO_CERNO	P61761 cercopithec
15	60.5	85.2	246	1 PRIO_CERNE	P61762 cercopithec
16	60.5	85.2	246	1 PRIO_CERTO	Q95176 cercocebus
17	60.5	85.2	246	1 PRIO_ERYPA	Q95174 erythrocebu
18	60.5	85.2	246	2 AAO83636	AAO83636 homo sapi
19	60.5	85.2	248	2 Q8VHV5	Q8VHV5 clethrionom
20	60.5	85.2	252	1 PRIO_ATEPA	P51446 ateles pani
21	60.5	85.2	252	1 PRIO_CALJA	P40247 callithrix
22	60.5	85.2	252	1 PRIO_CEBAP	P40249 cebus apell
23	60.5	85.2	253	1 PRIO_COLGU	P40251 colobus que
24	60.5	85.2	253	1 PRIO_GORGO	P40252 gorilla gor
25	60.5	85.2	253	1 PRIO_HUMAN	P04156 homo sapien
26	60.5	85.2	253	1 PRIO_HYLLA	P61767 hylobates s
27	60.5	85.2	253	1 PRIO_HYLSY	P61767 hylobates s
28	60.5	85.2	253	1 PRIO_MACFA	P40254 macaca fasc
29	60.5	85.2	253	1 PRIO_PANTR	P61768 pan troglod
30	60.5	85.2	253	1 PRIO_PONPY	P40256 pongo pygma
31	60.5	85.2	253	1 PRIO_PREFR	P40257 preabytis f

32	60.5	85.2	253	2 Q6FGR8	Q6FGR8 homo sapien
33	60.5	85.2	253	2 Q6JL99	Q6JL99 macaca mula
34	60.5	85.2	253	2 Q9Z0T5	Q9Z0T5 meriones un
35	60.5	85.2	253	2 AAS80162	AAS80162 homo sapi
36	60.5	85.2	253	2 AAR12192	AAR12192 macaca mu
37	60.5	85.2	254	1 PRIO_CRIGR	Q60506 cricetulus
38	60.5	85.2	254	1 PRIO_CRIMI	Q60488 cricetulus
39	60.5	85.2	254	1 PRIO_MESAU	P04273 mesocricetu
40	60.5	85.2	254	1 PRIO_MOUSE	P01925 mus musculus
41	60.5	85.2	254	1 PRIO_RAT	P13852 rattus norv
42	60.5	85.2	254	1 PRIO_SIGHI	Q320T3 sigmodon hi
43	60.5	85.2	254	2 Q866W8	Q866W8 tupaiia tana
44	60.5	85.2	254	2 Q9Z0T4	Q9Z0T4 sigmodon fu
45	60.5	85.2	254	2 Q8VHV6	Q8VHV6 apodemus sy

ALIGNMENTS

RESULT 1

Q78EH4
ID Q78EH4 PRELIMINARY; PRT; 145 AA.
AC Q78EH4 (TREMELrel. 27, Created)
DT 05-JUL-2004 (TREMELrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMELrel. 27, Last sequence update)
DE PRP 27-30 protein (Fragment).
GN Name=Prp 27-30;
OS Mesocricetus auratus (Golden hamster).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Mesocricetus.
OX NCBI_TaxID=10036;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=85176927; PubMed=2859120;
RA Oesch B., Westaway D., Waelchli M., McKinley M.P., Kent S.B.H.,
RA Aebersold R.H., Barry R.A., Tempel P., Teplow D.B., Hood L.E.,
RA Prusiner S.B., Weissmann C.;
RT "A cellular gene encodes scrapie PrP 27-30 protein."
RL Cell 40:735-746(1985).
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; K02234; AAA37093.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT CHAIN 1 >145 Potential.
FT NON_TER 145 145
SQ SEQUENCE 145 AA; 16500 MW; 10384CD7B8FAC9E2 CRC64;

Query Match 85.2%; Score 60.5; DB 2; Length 145;

Best Local Similarity 93.3%; Pred. No. 0.008; 0; Mismatches 0; Indels 1; Gaps 1;

Matches 1; Conservative 0;

QY 1 CWNITIKQ-TVTTTT 14
DB 90 CWNITIKQTVTTTT 104

RESULT 2

Q811W5
ID Q811W5 PRELIMINARY; PRT; 212 AA.
AC Q811W5 (TREMELrel. 24, Created)
DT 01-JUN-2003 (TREMELrel. 24, Last sequence update)
DT 01-JUN-2003 (TREMELrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMELrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

RESULT 5
 PRIO_CERAT STANDARD; PRT; 238 AA.
 AC Q95145; Q95200;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercocebus atterimus, and
 OS Macaca sylvanus (Barbary ape).
 OC Eukaryota; Metazoa; Chordata;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercocebus.
 OX NCBI_TaxID=36222, 9546;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL: U75384; AAB50623.1; -;
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion; octapep; 5.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KW NON_TER 1 15 By similarity.
 FT SIGNAL <1 15 Major prion protein.
 FT CHAIN 16 215 Removed in mature form (By similarity).
 FT PROPEP 216 238 GPI-anchor amidated serine (By
 FT LIPID 215 215 similarity).
 FT DISULFID 164 199 By similarity.
 FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 238 238 Q.
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;
 Query Match 85.2%; Score 60.5; DB 1; Length 238;
 Best Local Similarity 93.3%; Pred. No. 0.013; 0; Indels 1; Gaps 1;
 Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTTT 14
 DB 164 CWNITIKQTVTTTTT 178
 RESULT 6
 PRIO_THEGE STANDARD; PRT; 238 AA.
 AC Q95270;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP; Synonyms=PRP;
 OS Theropithecus gelada (Gelada baboon).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Theropithecus.
 OX NCBI_TaxID=9546;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL: U75383; AAB50630.1; -;
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion; octapep; 5.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW NON_TER 1 15 By similarity.
 FT SIGNAL <1 15 Major prion protein.
 FT CHAIN 16 215 Removed in mature form (By similarity).
 FT PROPEP 216 >238 By similarity.
 FT DISULFID 164 199 GPI-anchor amidated serine (By
 FT LIPID 215 215 similarity).
 FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 238 238 Q.
 SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

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Query Match      85.2%; Score 60.5; DB 1; Length 238;
Best Local Similarity 93.3%; Pred. No. 0.013; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CVNITIKQ-TVTTTT 14
DB 164 CVNITIKQHTVTTTT 178

RESULT 7
ID Q86XR1 PRELIMINARY; PRT; 238 AA.
AC Q86XR1;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; RA083635.1; --
DR InterPro; IPR000817; Prion.
DR Pfam; PF03981; Prion; octapep; 5.
DR PRINTS; PR00241; PRION.
DR SMART; SM00157; PRP.
DR PROSITE; PS00251; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAE CRC64;

Query Match      85.2%; Score 60.5; DB 2; Length 238;
Best Local Similarity 93.3%; Pred. No. 0.013; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CVNITIKQ-TVTTTT 14
DB 164 CVNITIKQHTVTTTT 178

RESULT 8
ID PRIO_AOTTR STANDARD; PRT; 239 AA.
AC P40245;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Aotus trivirgatus (Night monkey) (Douroucoulil).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotidae; Aotus.
OX NCBI_TaxID=9505;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE-95139066; PubMed-7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.B., Prusiner S.B.;
RT Prion protein gene variation among primates.;
RL J. Biol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC -1- host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC -1- rods.
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and

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CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL; U08293; AAC50082.1; --
CC FIR; S53633; IG04.
CC HSRP; P239YD000817; Prion.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 6.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00251; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT NON_TER 1
FT SIGNAL <1 15
FT CHAIN 16 222
FT PROPEP 223 >239
FT DISULFID 171 206
FT LIPID 222 222
FT CARBOHYD 173 173
FT CARBOHYD 189 189
FT DOMAIN 44 83
FT REPEAT 44 51
FT REPEAT 52 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT NON_TER 239 239
SQ SEQUENCE 239 AA; 26246 MW; 2EFB7E354B7024A CRC64;

Query Match      85.2%; Score 60.5; DB 1; Length 239;
Best Local Similarity 93.3%; Pred. No. 0.013; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0;

QY 1 CVNITIKQ-TVTTTT 14
DB 171 CVNITIKQHTVTTTT 185

RESULT 9
ID Q8VHV4 PRELIMINARY; PRT; 240 AA.
AC Q8VHV4;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Garbo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PR; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 240 240
FT SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match 85.2%; Score 60.5; DB 2; Length 240;
Best Local Similarity 93.3%; Pred. No. 0.013;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
DB 171 CWNITIKQHTVTTTT 185

RESULT 10
PRIO CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callicebus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callicebinae;
OC Callicebus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
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CC EMBL; U08312; AAC50100.1; -.
CC PIR; S71048; S71048.
CC HSSP; P23907; 1G04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion_octapep; 6.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein, GPI-anchor, Lipoprotein, Membrane, Prion, Repeat;
Signal.

FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 >241
FT DISULFID 172 207
FT LIPID 223 223
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT NON_TER 241 241
FT SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 241;
Best Local Similarity 93.3%; Pred. No. 0.013;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14
DB 172 CWNITIKQHTVTTTT 186

RESULT 11
PRIO MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Mandrillus sphinx (Mandrill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoinae; Mandrillus.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U08303; AAC50091.1; -.
CC PIR; S71056; S71056.
CC HSSP; P23907; 1G04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.

```

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DR Pfam: PF03991; Prion_octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1
FT CHAIN <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT LIPID 223 GPI-anchor amidated serine (By similarity).
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 241;
Best Local Similarity 93.3%; Pred. No. 0.013; 0; Mismatches 1; Gaps 1;
Matches 14; Conservative 0;

Qy 1 CWNITIKQ-TVTTTT 14
Db 172 CWNITIKQHTVTTTT 186

RESULT 12
ID P97895 PRELIMINARY; PRT; 243 AA.
AC P97895;
DT 01-MAY-1997 (TrEMBLrel. 03, Created)
DT 01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hamster scrapie prion (Prp 27-30) (Fragment).
OS Mesocricetus auratus (Golden hamster).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Mesocricetus.
OX NCBI_TaxID=10036;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=87108309; PubMed=3100471;
RA McKinley M.P., Prusiner S.B.;
RT "Biology and structure of scrapie prions.";
RL Int. Rev. Neurobiol. 28:1-57(1986).
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; M37381; AAA37090.1; -.
DR HSP; P04273; IBI0.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT SIGNAL 1 22 By similarity.
FT CHAIN 23 223 Major prion protein.
FT PROPEP 223 245 Removed in mature form (By similarity).
FT LIPID 222 222 GPI-anchor amidated serine (By similarity).
FT DISULFID 171 206 By similarity.
FT CARBOHYD 173 173 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 189 189 N-linked (GlcNAc...) (Potential).
FT DOMAIN 51 83 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 51 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
SQ SEQUENCE 243 AA; 26643 MW; 4F53612BBFF240F9 CRC64;

Query Match 85.2%; Score 60.5; DB 2; Length 243;
Best Local Similarity 93.3%; Pred. No. 0.013; 0; Mismatches 1; Gaps 1;
Matches 14; Conservative 0;

Qy 1 CWNITIKQ-TVTTTT 14
Db 168 CWNITIKQHTVTTTT 182

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RESULT 13
PRIO_CERAE STANDARD; PRT; 245 AA.
ID PRIO_CERAE
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rod".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstman-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
-----
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-----
DR EMBL; U08291; AAC50080.1; -.
DR EMBL; U08292; AAC50081.1; -.
DR PIR; S53627; S53627.
DR PIR; S71045; S71045.
DR HSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 5.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22 By similarity.
FT CHAIN 23 223 Major prion protein.
FT PROPEP 223 245 Removed in mature form (By similarity).
FT LIPID 222 222 GPI-anchor amidated serine (By similarity).
FT DISULFID 171 206 By similarity.
FT CARBOHYD 173 173 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 189 189 N-linked (GlcNAc...) (Potential).
FT DOMAIN 51 83 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 51 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
SQ SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 245;
Best Local Similarity 93.3%; Pred. No. 0.014;

```

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CWNITIKO-TVTTTT 14
 Db 171 CWNITIKOHTVTTTT 185

RESULT 14
 PRIO_CERMO STANDARD; PRT; 246 AA.
 ID P61761; Q95172; Q95173;
 AC P61761; Q95172; Q95173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercopithecus mona (Mona monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=36226;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Straussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
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 CC
 CC EMBL; U75386; AAB50625.1; --
 CC HSP; P23907; IG04.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC PRINTS; PR00341; PRION.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KW NON_TER 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 246 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT similarity).
 FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 77 84 4.
 FT REPEAT 84 84 5.
 SQ SEQUENCE 246 AA; 2690 MW; 835D147CA2B4FDD3 CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 246;
 Best local similarity 93.3%; Pred. NO. 0.014;
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
 QY 1 CWNITIKO-TVTTTT 14
 Db 172 CWNITIKOHTVTTTT 186

RESULT 15
 PRIO_CERNE STANDARD; PRT; 246 AA.
 ID P61762; Q95172; Q95173;
 AC P61762; Q95172; Q95173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercopithecus neglectus (DeBrazza's monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=56227;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Straussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL; U75387; AAB50626.1; --
 CC HSP; P23907; IG04.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC PRINTS; PR00341; PRION.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KW NON_TER 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 246 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT similarity).
 FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.

FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 85.2%; Score 60.5; DB 1; Length 246;
Best Local Similarity 93.3%; Pred No. 0.014; 0; Indels 1; Gaps 1;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
Qy 1 CUNTIKO-TTTTTT 14
Db 172 CUNTIKQHVTTTT 186

Search completed: October 26, 2004, 15:44:10
Job time : 33.5417 secs

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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:33:38 ; Search time 49.1667 Seconds
(without alignments)
145.924 Million cell updates/sec

Title: US-09-603-832-7
Perfect score: 103
Sequence: 1 ETDVKMERVVEQMCVTQYQ 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04.*
1: Geneseq1980s.*
2: Geneseq1990s.*
3: Geneseq2000s.*
4: Geneseq2001s.*
5: Geneseq2002s.*
6: Geneseq2003as.*
7: Geneseq2003bs.*
8: Geneseq2004s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	103	100.0	20	4 AAB66615	AAB66615 Mouse pr
2	103	100.0	124	5 AAG34340	AAG34340 Mouse mpr
3	103	100.0	124	5 AAG80852	AAG80852 Mouse tru
4	103	100.0	124	5 AAD24400	AD24400 mPrPt-EK-
5	103	100.0	208	3 AAB07316	AAB07316 Mouse pri
6	103	100.0	208	3 AAB07327	AAB07327 Mouse pri
7	103	100.0	208	5 AAB31904	AAB31904 Chimera-C
8	103	100.0	208	7 ADJ66133	ADJ66133 Mouse pri
9	103	100.0	209	5 AAB31905	AAB31905 HCHV type
10	103	100.0	211	4 AAB30801	AAB30801 Amino aci
11	103	100.0	225	6 ABR42793	ABr42793 Rat prion
12	103	100.0	226	7 ADB85240	ADB85240 Rat prion
13	103	100.0	254	2 AAR86714	AAR86714 Mouse pri
14	103	100.0	254	2 AAW69659	AAW69659 Mouse pri
15	103	100.0	254	2 AAW85900	AAW85900 Mouse pri
16	103	100.0	254	2 AAY07996	AAY07996 Murine pr
17	103	100.0	254	4 AAB72360	AAB72360 Hamster p
18	103	100.0	254	4 AAB61772	AAB61772 Mouse pri
19	103	100.0	254	4 AAB82118	AAB82118 Murine pr
20	103	100.0	254	4 AAB82111	AAB82111 Murine pr
21	103	100.0	254	4 AAB84522	AAB84522 Amino aci
22	103	100.0	254	4 AAG65852	AAG65852 Mouse pri
23	103	100.0	254	5 AAM50888	AAM50888 Mouse pri
24	103	100.0	254	5 ABE51786	ABE51786 Mouse pri
25	103	100.0	254	5 AAG31906	AAG31906 Mouse pri

26	103	100.0	254	5 AAB04427	ABb04427 Murine pr
27	103	100.0	254	5 AAE15602	AAe15602 Mouse PrP
28	103	100.0	254	5 AAE15609	AAe15609 Mouse PrP
29	103	100.0	254	6 ABUS8867	ABuS8867 Mouse PrP
30	103	100.0	254	6 AAE33226	AAe33226 Mouse PrP
31	103	100.0	254	6 ABR42792	ABr42792 Mouse PrP
32	103	100.0	254	7 ADC59531	ADc59531 Mouse pri
33	103	100.0	254	7 ADC52088	ADc52088 Mouse pri
34	103	100.0	254	7 ADD24194	ADd24194 Mouse pri
35	103	100.0	254	7 ADE56264	ADe56264 Rat Prote
36	103	100.0	254	7 ADE06737	ADe06737 Chinese h
37	103	100.0	254	7 ADE06736	ADe06736 Armenian
38	103	100.0	254	7 ADE06739	ADe06739 Mouse pri
39	103	100.0	254	7 ADE06740	ADe06740 Mouse pri
40	103	100.0	254	8 ADP47774	ADp47774 Mouse pri
41	103	100.0	254	8 ADH44558	ADh44558 Murine pr
42	103	100.0	254	8 ADK15538	ADk15538 Murine pr
43	103	100.0	254	8 ADJ92128	ADj92128 Mouse pri
44	103	100.0	255	4 AAB72357	ABb72357 Murine pr
45	103	100.0	255	4 AAB72358	ABb72358 Murine pr

ALIGNMENTS

RESULT 1
AAB66615
ID AAB66615 standard; peptide; 20 AA.

XX AAB66615;
XX
XX 05-APR-2001 (first entry)
XX
XX Mouse prion helix 3 peptide.
XX
XX Coiled-coil; prion; helix.
XX
XX Mus sp.
XX
XX WC200100010-AL.
XX
XX 04-JAN-2001.
XX
XX 23-JUN-2000; 2000MO-CA000736.
XX
XX 25-JUN-1999; 99US-0141203P.
XX
XX (KOND/) KONDEJEWSKI L H.
XX (IRVI/) IRVIN R T.
XX (HODG/) HODGES R S.
XX Kondejewski LH, Irvin RT, Hodges RS;
XX WPI; 2001-137855/14.

Coiled-coil polypeptide compositions useful for generating antibodies against a specific epitope, comprises a specific epitope from alpha-helical surface region of a protein inserted into coiled-coil polypeptide template.

Disclosure; Fig 4; 25pp; English.

The present invention relates to a coiled-coil polypeptide with a selected epitope from solvent accessible region of a protein inserted into a coiled-coil polypeptide template. The coiled-coil polypeptides are useful for generating antibodies specific to a selected epitope from a selected protein and also for identifying ligands that selectively bind the alpha-helical segment contained in the native protein. The conformation-specific antibodies are useful as therapeutic and diagnostic ligands

Sequence 20 AA;

Query Match 100.0%; Score 103; DB 4; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVKMERVVEQMCVTQYQ 20
| | | | | | | | | | | | | | | | | | | | | |
Db 1 ETDVKMERVVEQMCVTQYQ 20

RESULT 2

ID ABG94340 standard; protein; 124 AA.

XX AC ABG94340;

DT 10-DEC-2002 (first entry)

XX DE Mouse mPrPt protein.

XX KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytotatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.

XX OS Mus sp.

XX PN WO200256905-A2.

XX PD 25-JUL-2002.

XX PF 21-JAN-2002; 2002WO-IB000166.

XX PR 19-JAN-2001; 2001US-0262379P.

XX PR 04-MAY-2001; 2001US-0288549P.

XX PR 05-OCT-2001; 2001US-0326998P.

XX PR 07-NOV-2001; 2001US-0331045P.

XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;

XX PI Piossek C;

XX DR WPI; 2002-627351/67.

XX PT Molecular antigen array used in the production of vaccines for infectious diseases.

XX PS Disclosure; Page 438; 41pp; English.

CC This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (Abeta1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the antigen or antigenic determinant and the
CC scaffold interact through the association to form an ordered and
CC repetitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant Qbeta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cytotatic,
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention

XX Sequence 124 AA;

Query Match 100.0%; Score 103; DB 5; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVKMERVVEQMCVTQYQ 20
| | | | | | | | | | | | | | | | | | | | | |
Db 80 ETDVKMERVVEQMCVTQYQ 99

RESULT 3

ABG80652

XX ID ABG80652 standard; protein; 124 AA.

XX AC ABG80652;

XX DT 29-NOV-2002 (first entry)

XX DE Mouse truncated prion protein with C terminal cysteine containing linker.
XX KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutein;
KW graft versus host disease; Igs-mediated allergic reaction; anaphylaxis;
KW adult respiratory distress syndrome; ARDS; Crohn's disease;
KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
KW Grave's disease; systemic lupus erythematosus; osteoporosis;
KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
KW angioimmunoproliferative disease lymphadenopathy; Alzheimer's disease;
KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
KW enterokinase; cysteine-containing linker.

XX OS Mus sp.

XX OS Synthetic.

XX PN WO200256907-A2.

XX PD 25-JUL-2002.

XX PF 21-JAN-2002; 2002WO-IB000168.

XX PR 19-JAN-2001; 2001US-0262379P.

XX PR 04-MAY-2001; 2001US-0288549P.

XX PR 05-OCT-2001; 2001US-0326998P.

XX PR 07-NOV-2001; 2001US-0331045P.

XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVAARTIS PHARMA AG.

PA (MAUR) MAURER P.

PA (LECH) LECHNER F.

PA (ORTM) ORTMANN R.

PA (LUEO) LUEOEND R.

PA (STAU) STAUFENBIEL M.

PA (FREY) FREY P.

XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

PI Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

XX WPI; 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious diseases.

XX Example 7; Page 415; 41pp; English.

XX The invention relates to a composition comprising: (a) a non-natural

CC molecular scaffold comprising: (i) a core particle selected from: (1) a

CC core particle of a non-natural origin; and (2) a core particle of natural

CC origin; and (ii) an organiser comprising at least one first attachment

CC site, where the organiser is connected to the core particle by at least

CC one covalent bond; (b) an antigen or antigenic determinant with at least

CC one second attachment site, where the antigen or antigenic determinant is

CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second

CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

XX Sequence 124 AA;

Query Match 100.0%; Score 103; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 4.9e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQYQ 20
 DB 80 ETDVKMERVVEQMCVTQYQ 99

RESULT 4
 ADD24200
 ID ADD24200 standard; protein; 124 AA.

XX AC ADD24200;

XX DT 15-JAN-2004 (first entry)

XX DE mPrPt-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion, mPrPt-EK-Fc*.

XX Unidentified.

XX OS Prion.

XX EN WO2003059386-A2.

XX PD 24-JUL-2003.

XX PF 17-JAN-2003; 2003WO-EP000460.

XX PR 18-JAN-2002; 2002US-00050902.

XX PR 21-JAN-2002; 2002WO-IB000166.

XX PR 08-JUL-2002; 2002US-0393725P.

XX PR 18-JUL-2002; 2002US-0396590P.

XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX PI Bachmann M, Maurer P, Pelliccioli B, Renner WA;

XX DR WPI; 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.

XX Example 13; SEQ ID NO 93; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
 CC which was used during the exemplification of the invention.

XX Sequence 124 AA;

Query Match 100.0%; Score 103; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 4.9e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQYQ 20
 DB 80 ETDVKMERVVEQMCVTQYQ 99

RESULT 5
 AAB07316
 ID AAB07316 standard; protein; 208 AA.

XX AC AAB07316;

XX DT 17-OCT-2000 (first entry)

XX DE Mouse prion protein sequence.

XX Mouse; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX OS Mus sp.

XX PH Key Location/Qualifiers

XX FT Region 37..68

XX FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGQG (AAB07319)"

XX FT Disulfide-bond 156..191

XX FT Modified-site 208

XX FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"

XX EN WO200029850-A1.

XX PD 25-MAY-2000.

XX PF 27-OCT-1999; 99WO-FI000897.

XX PR 17-NOV-1998; 98FI-00002481.

XX PA (WALL-) WALLAC OY.

XX PA (BBSR-) BBSRC OFFICE.

XX PI Hope J, Barnard GJR, Birkett CR;

XX DR WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.

XX Disclosure; Page 41-42; 50pp; English.

CC The present sequence is the mouse prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 CC Sequence 208 AA;
 CC
 CC Query Match 100.0%; Score 103; DB 3; Length 208;
 CC Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 ETDVKMMERVVQMCVTOYQ 20
 CC Db 177 ETDVKMMERVVQMCVTOYQ 196
 CC
 CC RESULT 6
 CC AAB07327
 CC ID AAB07327 standard; protein; 208 AA.
 CC XX
 CC AC AAB07327;
 CC DT 17-OCT-2000 (first entry)
 CC XX
 CC DE Mouse prion protein sequence.
 CC XX
 CC KW Mouse; prion protein; transmissible spongiform encephalopathy;
 CC KW bovine spongiform encephalopathy; TSE diagnosis; PrP.
 CC XX
 CC OS Mus sp.
 CC XX
 CC FH Key Location/Qualifiers
 CC Region 37..68
 CC FT /note= "Repeat region consisting of tandem repeats of
 CC FT repeat unit: PHGGGWGQ (AAB07319)"
 CC FT Disulfide-bond 156..191
 CC FT Modified-site 208
 CC FT /note= "C-terminal phospho-inositol glycolipid membrane
 CC FT anchor (-GPI)"
 CC XX
 CC PN WO200029849-A1.
 CC XX
 CC PD 25-MAY-2000.
 CC XX
 CC PF 27-OCT-1999; 99WO-FI000896.
 CC XX
 CC PR 17-NOV-1998; 98FI-00002480.
 CC XX
 CC PA (WALL-) WALLAC OY.
 CC PA (BBSR-) BBSRC OFFICE.
 CC XX
 CC PI Hope J, Barnard GJR, Birkett CR;
 CC DR WPI; 2000-399778/34.
 CC XX
 CC New immunoassay for prion protein, used for determination of
 CC PT transmissible spongiform encephalopathies in mammals, comprises specific
 CC PT capture antibody.
 CC XX
 CC PS Disclosure; Page 41-42; 50pp; English.
 CC XX
 CC The present sequence is the mouse prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 CC Sequence 208 AA;
 CC
 CC Query Match 100.0%; Score 103; DB 3; Length 208;
 CC Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 ETDVKMMERVVQMCVTOYQ 20
 CC Db 177 ETDVKMMERVVQMCVTOYQ 196
 CC
 CC RESULT 7
 CC ABG31904
 CC ID ABG31904 standard; protein; 208 AA.
 CC XX
 CC AC ABG31904;
 CC DT 05-NOV-2002 (first entry)
 CC XX
 CC DE Chimera-type prion protein #2.
 CC XX
 CC KW Prion; follicular dendritic cells; PDC; infection; blood preparation;
 CC KW food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 CC XX
 CC OS Synthetic.
 CC XX
 CC PN WO200261418-A1.
 CC XX
 CC PD 08-AUG-2002.
 CC XX
 CC PF 31-JAN-2002; 2002WO-JF000803.
 CC XX
 CC PR 31-JAN-2001; 2001JP-00024279.
 CC PA (TOHO) UNIV TOHOKU.
 CC XX
 CC PI Kitamoto T, Miyoshi K, Mohri S;
 CC DR WPI; 2002-619277/66.
 CC XX
 CC Screening (non-)human prion disease infection factor based on abnormal
 CC PT prion protein sedimentation in non-human follicular dendritic cells as
 CC PT indication, applicable in safety test on e.g. drugs and cosmetics.
 CC XX
 CC PS Claim 9; Page 55-57; 69pp; Japanese.
 CC XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 CC
 CC Sequence 208 AA;
 CC
 CC Query Match 100.0%; Score 103; DB 5; Length 208;
 CC Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 ETDVKMMERVVQMCVTOYQ 20
 CC Db 178 ETDVKMMERVVQMCVTOYQ 197
 CC

CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 CC Sequence 208 AA;
 CC
 CC Query Match 100.0%; Score 103; DB 3; Length 208;
 CC Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 ETDVKMMERVVQMCVTOYQ 20
 CC Db 177 ETDVKMMERVVQMCVTOYQ 196
 CC
 CC RESULT 7
 CC ABG31904
 CC ID ABG31904 standard; protein; 208 AA.
 CC XX
 CC AC ABG31904;
 CC DT 05-NOV-2002 (first entry)
 CC XX
 CC DE Chimera-type prion protein #2.
 CC XX
 CC KW Prion; follicular dendritic cells; PDC; infection; blood preparation;
 CC KW food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 CC XX
 CC OS Synthetic.
 CC XX
 CC PN WO200261418-A1.
 CC XX
 CC PD 08-AUG-2002.
 CC XX
 CC PF 31-JAN-2002; 2002WO-JF000803.
 CC XX
 CC PR 31-JAN-2001; 2001JP-00024279.
 CC PA (TOHO) UNIV TOHOKU.
 CC XX
 CC PI Kitamoto T, Miyoshi K, Mohri S;
 CC DR WPI; 2002-619277/66.
 CC XX
 CC Screening (non-)human prion disease infection factor based on abnormal
 CC PT prion protein sedimentation in non-human follicular dendritic cells as
 CC PT indication, applicable in safety test on e.g. drugs and cosmetics.
 CC XX
 CC PS Claim 9; Page 55-57; 69pp; Japanese.
 CC XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 CC
 CC Sequence 208 AA;
 CC
 CC Query Match 100.0%; Score 103; DB 5; Length 208;
 CC Best Local Similarity 100.0%; Pred. No. 8.5e-09;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 ETDVKMMERVVQMCVTOYQ 20
 CC Db 178 ETDVKMMERVVQMCVTOYQ 197
 CC

PT also related aggregates, fibrils and polymers.
 XX Claim 11; Page 137-138; 188pp; English.
 XX The present sequence represents a prion protein. The specification
 CC describes chimeric polypeptides, which comprise at least one SCHAG (self-
 CC coalesces into higher-order aggregates) amino acid sequence fused in
 CC frame with a polypeptide of interest (which is other than a marker
 CC protein, a glutathione-S-transferase or a staphylococcal nuclear
 CC protein). The specification also describes chimeric polypeptides that
 CC comprises an amyloidogenic domain that causes aggregation into fibrils.
 CC The chimeric polypeptides are used to prepare polymers with multiple
 CC reactivities, e.g. derivatised with enzymes, or specific binding
 CC partners, and useful e.g. for performing multi-step chemical reactions
 CC They can be used to create an inducible, or stable phenotypic alteration in
 CC a cell, e.g. for gene therapy, protein production, imparting disease
 CC resistance to plants, altering plant pigmentation and for diagnosis and
 CC treatment of prion diseases
 XX SQ Sequence 211 AA;
 Query Match 100.0%; Score 103; DB 4; Length 211;
 Best Local Similarity 100.0%; Pred. No. 8.7e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVKMERVVVEQMCVTQYQ 20
 |||||
 Db 179 ETDVKMERVVVEQMCVTQYQ 198
 |||||
 RESULT 11
 ABR42793
 ID ABR42793 standard; protein; 225 AA.
 XX
 AC ABR42793;
 XX
 DT 08-SEP-2003 (first entry)
 XX
 DE Rat prion protein.
 XX
 KW Rat; prion protein; prionosis; neurotropic; neuroprotective; immunogen;
 XX vaccine.
 XX
 OS Rattus sp.
 XX
 PN WO2003045128-A2.
 XX
 PD 05-JUN-2003.
 XX
 PF 21-NOV-2002; 2002WO-US037634.
 XX
 PR 21-NOV-2001; 2001US-0331801P.
 XX
 PA (UTNY) UNIV NEW YORK STATE.
 XX
 PI Frangione B, Wisniewski T, Sigurdson EM;
 XX WPI; 2003-505145/47.
 XX
 XX New synthetic immunogenic but non-deposit forming peptides, useful for
 PT inducing an immune response to prions, amyloids, amylin or amylin
 PT fibrils, particularly for treating e.g. Alzheimer's, scrapie or
 PT Creutzfeldt-Jacob disease.
 XX
 XX Disclosure; Page 228-229; 265pp; English.
 XX
 CC The present sequence is the amino acid sequence of rat prion protein. The
 CC invention provides a synthetic immunogenic but non-deposit-forming
 CC polypeptide that is homologous to human (see ABR42789) or bovine (see
 CC ABR42798) prion protein. Such peptides, alone or conjugated to an
 CC immunostimulant, are used to induce an immune response to prion, and
 CC immunizing compositions comprising the peptides are used in a claimed
 CC method for inducing an immune response to hpp and prion deposits.
 CC
 CC Antibodies directed against the peptides can be used in passive
 CC immunization
 XX SQ Sequence 225 AA;
 Query Match 100.0%; Score 103; DB 6; Length 225;
 Best Local Similarity 100.0%; Pred. No. 9.3e-09;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVKMERVVVEQMCVTQYQ 20
 |||||
 Db 172 ETDVKMERVVVEQMCVTQYQ 191
 |||||
 RESULT 12
 ADB85240
 ID ADB85240 standard; protein; 226 AA.
 XX
 AC ADB85240;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Rat prion-related protein SEQ ID NO:121.
 XX
 KW rat; streptozocin; kinase; phosphatase; ion channel protein; receptor;
 KW transporter; G-protein coupled receptor; GPCR; DNA-binding proteins;
 KW protease; enzyme; analgesic; gene therapy; pain; diabetes.
 XX
 OS Rattus norvegicus.
 XX
 PN EPI284297-A2.
 XX
 PD 19-FEB-2003.
 XX
 PF 26-JUL-2002; 2002EP-00255228.
 XX
 PR 27-JUL-2001; 2001GB-00018354.
 XX
 PR 07-FEB-2002; 2002GB-00002880.
 XX
 PA (WARN) WARNER LAMBERT CO.
 XX
 XX Brooksbank RA, Dixon AK, Lee K, Pinnock RD;
 XX WPI; 2003-364994/35.
 XX
 DR N-PSDB; ADB85241.
 XX
 XX Use of gene sequence that is down-regulated in response to streptozocin-
 PT induced diabetes, vector, host cell, animal, polypeptide and antibody, in
 PT screening of compounds for treating or diagnosing pain.
 XX
 XX Disclosure; Page 190; 256pp; English.
 XX
 CC The invention relates to a novel isolated gene sequence that is down-
 CC regulated in the spinal cord in response to streptozocin-induced
 CC diabetes, or comprising, hybridising or having at least 80% sequence
 CC identity to a sequence whose expression products are kinases,
 CC phosphatases, ion channel proteins, receptors, transporters, G-protein
 CC coupled receptor proteins, DNA-binding proteins, proteases or enzymes,
 CC given in the specification. A gene of the invention has analgesic
 CC activity, and may have a use in gene therapy. The gene sequences, vector,
 CC host cell, animal, polypeptide and antibody are useful for screening of
 CC compounds for diagnosing or treating pain. The kits are useful for
 CC simultaneous, separate or sequential detecting and/or quantifying down-
 CC regulation of a gene sequence in the spinal cord of a mammal in response
 CC to streptozocin-induced diabetes. The compound or pharmaceutical
 CC composition is useful as a medicament for treating or diagnosing pain.
 CC The present sequence represents a protein encoded by a gene of the
 CC invention.
 XX SQ Sequence 226 AA;
 Query Match 100.0%; Score 103; DB 7; Length 226;
 Best Local Similarity 100.0%; Pred. No. 9.3e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 172 ETDVKMERVVEQMCVTQYQ 191

RESULT 13

AAW69659
ID AAW69659 standard; protein; 254 AA.

AC AAW69659;
DT 15-OCT-1996 (first entry)

DE Mouse prion protein, MoPrP.

XX Chimeric gene; chimeric prion; transgenic animal; diagnosis;
KW spongiform encephalopathy; PrP; central nervous system; CNS;
KW Creutzfeldt-Jakob disease; CJD; BSE.

OS Mus musculus.

XX WO9531466-A1.

PN 23-NOV-1995.

XX 10-APR-1995; 95WO-US004426.

XX 13-MAY-1994; 94US-00242188.

XX (REGC) UNIV CALIFORNIA.

PA Prusiner SB, Scott MR, Telling G;

PI WPI; 1996-010868/01.

XX Chimeric prion protein gene - for formation of a transgenic animal
PT susceptible to prion infection by prion(s) normally specific for a
PT different species.

XX Disclosure; Fig 3; 65pp; English.

XX Pathogenic prions in a sample can be detected by injecting the sample to
CC be tested into a transgenic mouse. The mouse genome includes a chimeric
CC PrP gene in which the gene includes a portion of a gene of the animal
CC (e.g. human) in danger of infection from prions in the sample. Preferred
CC transgenic mice express a chimeric prion protein (PrP) in which a segment
CC of this mouse PrP, MoPrP, is replaced with the corresponding human PrP
CC sequence. The chimeric PrP, designated MHu2MoPrP, differs from this MoPrP
CC by 9 AA between residues 96 and 167

XX Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.1e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 199 ETDVKMERVVEQMCVTQYQ 218

RESULT 14

AAW69659
ID AAW69659 standard; protein; 254 AA.

AC AAW69659;

XX 25-MAR-2003 (revised)

DT 19-OCT-1998 (first entry)

XX Mouse prion protein MoPrP.

XX Mouse; prion protein; PrP; transgenic animal; artificial gene;
KW Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.
OS Mus sp.

XX US5792901-A.

XX 11-AUG-1998.

XX 30-JUL-1996; 96US-00692892.

XX 13-MAY-1994; 94US-00242188.

XX 31-JUL-1995; 95US-00509261.

XX 31-AUG-1995; 95US-00521992.

XX (REGC) UNIV CALIFORNIA.

XX Scott MR, Telling GC, Prusiner SB;

XX WPI; 1998-456207/39.

XX Transgenic mouse with altered PrP gene - for detecting disease-causing
PT prions.

XX Example 8; Fig 3; 37pp; English.

XX A transgenic mouse has been developed which comprises a genome in which
CC both alleles of an endogenous PrP (prion protein) gene of the mouse are
CC ablated, the genome containing operatively inserted all exogenous non-
CC mouse PrP gene. The mouse is susceptible to infection with prions which
CC generally only infect a genetically diverse mammal due to the presence of
CC the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
CC symptoms of prion disease within 200 days or less after inoculation with
CC prions which generally only infect a genetically diverse mammal. Also
CC described in the present invention are: (A) a method of producing the
CC transgenic mouse; and (B) determining the presence of infectious prions
CC in a sample obtained from a bovine. The transgenic mouse is used to
CC detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
CC disease of humans caused by prions. The present sequence represents mouse
CC prion protein (MoPrP), used in an example from the present invention.
CC (Updated on 25-MAR-2003 to correct PF field.)

XX Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.1e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 199 ETDVKMERVVEQMCVTQYQ 218

RESULT 15

AAW85900
ID AAW85900 standard; peptide; 254 AA.

XX AAW85900;

XX 12-FEB-1999 (first entry)

XX Mouse prion protein (PrP) sequence.

XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
KW Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
KW Cosmectic; therapeutic; mouse.

XX Mus sp.

XX US5846533-A.

XX 08-DEC-1998.

```
XX 13-SEP-1996; 96US-00713939.
XX
XX 14-SEP-1995; 95US-00528104.
XX
XX (REGC ) UNIV CALIFORNIA.
XX (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX WPI; 1999-058996/05.
XX
XX Antibody specific for scrapie isoform of prion protein - useful for
XX diagnosis and therapy.
XX
XX Disclosure; Col 39-42; 58pp; English.
XX
XX This represents a mouse prion protein (PrP) sequence. The invention
XX relates to an antibody that is capable of binding to native PrP(Sc), the
XX scrapie isoform of PrP. The antibody is produced by a method that
XX comprises synthesising a library of antibodies on phages, contacting the
XX phages with a composition containing PrP proteins isolating phages that
XX bind to native PrP(Sc) in situ, obtaining an antibody from the phages
XX and optionally analysing the phages to determine a PrP(Sc) binding sequence
XX encoding in amino acid sequence to which the native PrP(Sc) binds. The
XX antibody is used to detect disease-associated PrP, especially in
XX Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
XX can also be used to neutralise the infectivity of PrP(Sc). Assays using
XX the antibodies can be used to screen for disease-associated PrP in
XX pharmaceutical products, foods and cosmetics or for therapeutic purposes
XX
XX Sequence 254 AA;
XX
XX Query Match 100.0%; Score 103; DB 2; Length 254;
XX Best Local Similarity 100.0%; Pred. No. 1.1e-08;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 ETDVQMMERVRVEQMCVTOYQ 20
XX |||||
XX DB 199 ETDVQMMERVRVEQMCVTOYQ 218
XX
XX Search completed: October 26, 2004, 15:42:11
XX Job time : 49.1667 secs
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:39:39 ; Search time 49.1667 Seconds
(without alignments)
131.698 Million cell updates/sec

Title: US-09-603-832-7
Perfect score: 103
Sequence: 1 ETDVKMERVVEQMCVTQYQ 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1364641 seqs, 323758627 residues

Total number of hits satisfying chosen parameters: 1364641

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match: 0%

Listing first 45 summaries

Database : Published Applications AA.*
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3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pdb.*
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18: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pdb.*
19: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pdb.*
20: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pdb.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	103	100.0	124	14	US-10-050-902-324
2	103	100.0	124	14	US-10-050-898-324
3	103	100.0	124	14	US-10-346-190-93
4	103	100.0	164	9	US-09-745-003-12
5	103	100.0	209	16	US-10-470-848-6
6	103	100.0	209	16	US-10-470-848-7
7	103	100.0	225	14	US-10-301-488A-25
8	103	100.0	225	15	US-10-301-448-25
9	103	100.0	226	14	US-10-205-194-121
10	103	100.0	254	9	US-09-823-494-19
11	103	100.0	254	9	US-09-823-494-28
12	103	100.0	254	9	US-09-943-906-1
13	103	100.0	254	13	US-10-106-574-5

14	103	100.0	254	13	US-10-106-574-6
15	103	100.0	254	13	US-10-106-574-7
16	103	100.0	254	13	US-10-106-574-8
17	103	100.0	254	14	US-10-353-780-10
18	103	100.0	254	14	US-10-304-630-20
19	103	100.0	254	14	US-10-304-630-21
20	103	100.0	254	14	US-10-304-630-22
21	103	100.0	254	14	US-10-304-630-23
22	103	100.0	254	14	US-10-301-488A-24
23	103	100.0	254	14	US-10-410-907A-6
24	103	100.0	254	14	US-10-410-907A-7
25	103	100.0	254	14	US-10-410-907A-9
26	103	100.0	254	14	US-10-410-907A-10
27	103	100.0	254	14	US-10-346-190-87
28	103	100.0	254	14	US-10-435-602-1
29	103	100.0	254	14	US-10-438-628-2
30	103	100.0	254	15	US-10-301-448-24
31	103	100.0	254	15	US-10-470-848-9
32	103	100.0	255	16	US-10-470-848-5
33	103	100.0	350	14	US-10-050-902-323
34	103	100.0	350	14	US-10-050-898-323
35	103	100.0	350	14	US-10-346-190-92
36	103	100.0	439	13	US-10-115-984-2
37	102	99.0	263	9	US-09-943-906-3
38	102	99.0	263	14	US-10-435-602-3
39	101	98.1	117	14	US-10-050-902-349
40	101	98.1	117	14	US-10-050-898-349
41	101	98.1	117	14	US-10-346-190-90
42	101	98.1	161	9	US-09-745-003-9
43	101	98.1	256	13	US-10-103-551-2
44	101	98.1	256	13	US-10-103-551-6
45	101	98.1	256	13	US-10-103-551-8

ALIGNMENTS

RESULT 1
US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Piossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPt construct
US-10-050-902-324

Query Match 100.0%; Score 103; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-08;

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Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVVEQMCVTQYQ 20
Db 80 ETDVKMERVVVEQMCVTQYQ 99

RESULT 2
US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Piossek, Christine
; APPLICANT: Ortmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenberg, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE: INFORMATION: Protein sequence of mPrPt
; OTHER INFORMATION:
US-10-050-898-324

Query Match 100.0%; Score 103; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVVEQMCVTQYQ 20
Db 80 ETDVKMERVVVEQMCVTQYQ 99

RESULT 3
US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Elia
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-06
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20

Query Match 100.0%; Score 103; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1.5e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVVEQMCVTQYQ 20
Db 80 ETDVKMERVVVEQMCVTQYQ 99

RESULT 4
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PrP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
; OTHER INFORMATION:
US-09-745-003-12

Query Match 100.0%; Score 103; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 2.1e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVVEQMCVTQYQ 20
Db 109 ETDVKMERVVVEQMCVTQYQ 128

RESULT 5
US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:CHM-type prion protein
US-10-470-848-6

Query Match 100.0%; Score 103; DB 16; Length 209;
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Best Local Similarity 100.0%; Pred. No. 2.7e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 178 ETDVKMERVVEQMCVTQYQ 197

RESULT 6
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; PRIOR FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Chv type prion protein

US-10-470-848-7

Query Match 100.0%; Score 103; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 2.7e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 178 ETDVKMERVVEQMCVTQYQ 197

RESULT 7
US-10-301-488A-25
; Sequence 25, Application US/10301488A
; Publication No. US20030166558A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Einar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301,488A
; PRIOR FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/331,801
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 25
; LENGTH: 225
; TYPE: PRT
; ORGANISM: Rat
; OTHER INFORMATION: PrP

US-10-301-488A-25

Query Match 100.0%; Score 103; DB 14; Length 225;
Best Local Similarity 100.0%; Pred. No. 2.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 172 ETDVKMERVVEQMCVTQYQ 191

RESULT 8
US-10-301-448-25
; Sequence 25, Application US/10301448
; Publication No. US2004009564A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Einar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301,448
; PRIOR FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 60/331,801
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 25
; LENGTH: 225
; TYPE: PRT
; ORGANISM: Rat
; OTHER INFORMATION: PrP

US-10-301-448-25

Query Match 100.0%; Score 103; DB 15; Length 225;
Best Local Similarity 100.0%; Pred. No. 2.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 172 ETDVKMERVVEQMCVTQYQ 191

RESULT 9
US-10-205-194-121
; Sequence 121, Application US/10205194
; Publication No. US20030134301A1
; GENERAL INFORMATION:
; APPLICANT: Warner-Lambert Company
; APPLICANT: Lee, Kevin
; APPLICANT: Dixon, Alistair
; APPLICANT: Brooksbank, Robert
; APPLICANT: Pincock, Robert
; TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
; FILE REFERENCE: WL-A-018201
; CURRENT APPLICATION NUMBER: US/10/205,194
; PRIOR FILING DATE: 5200-07-24
; PRIOR APPLICATION NUMBER: GB 0118354.0
; NUMBER OF SEQ ID NOS: 177
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 121
; LENGTH: 226
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURE:
; OTHER INFORMATION: PrP

US-10-205-194-121

Query Match 100.0%; Score 103; DB 14; Length 226;
Best Local Similarity 100.0%; Pred. No. 2.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20
Db 172 ETDVKMERVVEQMCVTQYQ 191

RESULT 10
US-09-823-494-19
; Sequence 19, Application US/09823494
; Publication No. US20010041790A1

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; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 19
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-823-494-19

Query Match      100.0%; Score 103; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.3e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
   |||||
Db 199 ETDVKMMERVVEQMCVTQYQ 218

RESULT 11
US-09-823-494-28
; Sequence 28, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 28
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-823-494-28

Query Match      100.0%; Score 103; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.3e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
   |||||
Db 199 ETDVKMMERVVEQMCVTQYQ 218

RESULT 12
US-09-943-906-1
; Sequence 1, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
```

```
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/943,906
; FILING DATE: 30-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/550,374
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-943-906-1

Query Match      100.0%; Score 103; DB 9; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.3e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
   |||||
Db 199 ETDVKMMERVVEQMCVTQYQ 218

RESULT 13
US-10-106-574-5
; Sequence 5, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patent In version 3.1
; SEQ ID NO 5
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-5

Query Match      100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.3e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
   |||||
Db 199 ETDVKMMERVVEQMCVTQYQ 218
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RESULT 14
US-10-106-574-6
; Sequence 6, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-6

Query Match 100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.3e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20
|||
Db 199 ETDVKMERVVQMCVTQYQ 218

RESULT 15
US-10-106-574-7
; Sequence 7, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-7

Query Match 100.0%; Score 103; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.3e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20
|||
Db 199 ETDVKMERVVQMCVTQYQ 218

Search completed: October 26, 2004, 15:46:48
Job time : 49.1667 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:36:59 ; Search time 11.6667 Seconds
(without alignments)
164.943 Million cell updates/sec

Title: US-09-603-832-7
Perfect score: 103
Sequence: 1 ETDVKMERVVQMCVTQYQ 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- 1: pir1.*
- 2: pir2.*
- 3: pir3.*
- 4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	226	2 A53892	prion-related prot
2	103	100.0	254	2 B34759	prion protein - go
3	103	100.0	254	2 A34759	prion protein - Ch
4	103	100.0	254	2 A23544	major prion protei
5	101	98.1	256	2 JU0268	major prion protei
6	101	98.1	264	2 A54330	major prion protei
7	101	98.1	264	2 S37137	prion protein - gr
8	99	96.1	232	2 S71041	major prion protei
9	99	96.1	241	2 S71048	major prion protei
10	99	96.1	241	2 S71056	major prion protei
11	99	96.1	245	2 S71045	major prion protei
12	99	96.1	252	2 161848	major prion protei
13	99	96.1	253	2 1U0HU	major prion protei
14	99	96.1	253	2 S84423	major prion protei
15	99	96.1	253	2 S71055	major prion protei
16	99	96.1	253	2 S53635	prion protein - si
17	99	96.1	253	2 S37032	major prion protei
18	99	96.1	253	2 161847	major prion protei
19	97	94.2	252	2 JC6175	prion protein - ra
20	97	94.2	256	2 S37149	prion protein - go
21	97	94.2	256	2 A54281	major prion protei
22	96	93.2	257	2 J01900	major prion protei
23	94	91.3	245	2 S53627	major prion protei
24	94	91.3	252	2 S53634	major prion protei
25	94	91.3	252	2 S53631	major prion protei
26	94	91.3	252	2 S53624	major prion protei
27	94	91.3	253	2 S53623	major prion protei
28	94	91.3	253	2 S53620	major prion protei
29	94	91.3	253	2 S53625	major prion protei

30	94	91.3	253	2 S53617	major prion protei
31	94	91.3	253	2 S53614	major prion protei
32	94	91.3	253	2 S53616	major prion protei
33	94	91.3	253	2 S53618	major prion protei
34	94	91.3	253	2 S53619	major prion protei
35	94	91.3	254	1 U0HYIH	major prion PrP-Sc
36	94	91.3	257	2 A23545	major prion PrP27-
37	94	91.3	260	2 S53629	major prion protei
38	90	87.4	239	2 S53633	major prion protei
39	50	48.5	267	1 UJCH	prion protein homo
40	50	48.5	267	2 A37372	prion protein - ch
41	50	48.5	273	2 A46280	hypothetical prote
42	46	44.7	2241	2 S09811	hypothetical prote
43	44	42.7	766	2 T47944	transcription fact
44	43	41.7	264	2 I39141	binding protein co
45	43	41.7	319	2 F83402	

ALIGNMENTS

RESULT 1

AS3892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G20639
C:Superfamily: major prion protein

Query Match 100.0%; Score 103; DB 2; Length 226;

Best Local Similarity 100.0%; Pred. No. 2.1e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20

Db 172 ETDVKMERVVQMCVTQYQ 191

RESULT 2

B34759
prion protein - golden hamster
C:Species: Mesocricetus auratus (golden hamster)
C:Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C:Accession: B34759
R:Kowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusine
Mol. Cell. Biol. 10, 1153-1163, 1990
A:Title: Three hamster species with different scrapie incubation times and neuropathol
A:Reference number: A34759; MUID:90158578; PMID:2406562
A:Accession: B34759
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-254 <LOW>
A:Cross-references: GB:M33959; NID:g191182; PIDN:AAA37014.1; PID:g191183
C:Superfamily: major prion protein

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 2.4e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20

Db 200 ETDVKMERVVQMCVTQYQ 219

RESULT 3

A:Protein - Chinese hamster
 C:Species: Cricetus griseus (Chinese hamster)
 C:Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
 C:Accession: A34759
 R:Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner, M.; Cell. Biol. 10, 1153-1163, 1990
 A:Title: Three hamster species with different scrapie incubation times and neuropathology
 A:Reference number: A34759; MUID:90158578; PMID:2406562
 A:Accession: A34759
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-254 <LOW>
 A:Cross-references: UNIPROT:Q60506; GB:M33958; NID:gl91180; PIDN:AAA37013.1; PID:g387056
 C:Superfamily: major prion protein

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 2.4e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20

DB 200 ETDVKMERVVQMCVTQYQ 219

RESULT 4

A:Protein - mouse
 C:Species: Mus musculus (house mouse)
 C:Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004
 C:Accession: A29669; A23544; S02521; A22315
 R:Westaway, D.; Goodman, P.A.; Wierenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.; Cell 51, 651-662, 1987
 A:Title: Distinct prion proteins in short and long scrapie incubation period mice.
 A:Reference number: A29669; MUID:88052869; PMID:2890436
 A:Accession: A29669
 A:Molecule type: DNA
 A:Residues: 1-254 <WES>
 A:Cross-references: UNIPROT:P04925; GB:M18070; NID:g200528; PIDN:AAA39997.1; PID:g200529
 A:Experimental source: strains NZW and I/LnJ
 A:Note: the sequence shown is from the NZW strain; the sequence from the I/LnJ strain differs by 1 residue
 R:Locht, C.; Chesebro, B.; Race, R.; Keith, J.M.
 Proc Natl Acad Sci U.S.A. 83, 6372-6376, 1986
 A:Reference number: A23544; MUID:86313583; PMID:3462700
 A:Accession: A23544
 A:Molecule type: mRNA
 A:Residues: 1-254 <LOC>
 R:Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.
 Eur. J. Biochem. 172, 271-277, 1988
 A:Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain and in cultured cells
 A:Reference number: S02521; MUID:88166895; PMID:2894984
 A:Accession: S02521
 A:Molecule type: protein
 A:Residues: 1-254 <HOP>
 R:Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.; Nature 315, 331-333, 1985
 A:Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and uninfected mice
 A:Reference number: A22315; MUID:85213844; PMID:3923361
 A:Accession: A22315
 A:Molecule type: mRNA
 A:Residues: 87-132, 'V', 134-164 <CHE>
 C:Superfamily: major prion protein
 C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidylcholine; scrapie
 F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-231/Product: major prion protein #status predicted <MAT>
 F:232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F:178-213/Disulfide bonds: #status predicted
 F:180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 2.4e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20

DB 199 ETDVKMERVVQMCVTQYQ 218

RESULT 5

A:Protein - bovine
 C:Species: Bos primigenius taurus (cattle)
 C:Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
 C:Accession: J00268
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.; submitted to JIPID, November 1991
 A:Reference number: J00268
 A:Accession: J00268
 A:Molecule type: DNA
 A:Residues: 1-256 <YOS>
 A:Cross-references: UNIPROT:Q01880
 C:Superfamily: major prion protein
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F:1-24/Domain: signal sequence #status predicted <SIG>
 F:25-256/Product: major prion protein #status predicted <MAT>
 F:60-91/Region: 8-residue repeats
 F:182-217/Disulfide bonds: #status predicted
 F:184,200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 98.1%; Score 101; DB 2; Length 256;

Best Local Similarity 90.0%; Pred. No. 5.2e-09;

Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20

DB 203 ETDVKMERVVQMCVTQYQ 222

RESULT 6

A:Protein - bovine
 C:Species: Bos primigenius taurus (cattle)
 C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
 C:Accession: A54330; J00953; J00952; A48551; S07347; I46931
 R:Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.; J. Gen. Virol. 72, 201-204, 1991
 A:Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C repeat
 A:Reference number: A54330; MUID:9116314; PMID:1671225
 A:Accession: A54330
 A:Molecule type: DNA
 A:Residues: 1-264 <GOL>
 A:Cross-references: UNIPROT:P10279; GB:X55882; NID:g683; PIDN:CAA39368.1; PID:g684
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.; submitted to JIPID, November 1991
 A:Reference number: J00952
 A:Accession: J00952
 A:Molecule type: DNA
 A:Residues: 1-264 <YOS>
 A:Cross-references: GB:D10613; NID:g217595; PIDN:BAA01468.1; PID:g217596
 A:Accession: J00952
 A:Molecule type: DNA
 A:Residues: 1-217, 'K', 219-264 <YOS>
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.; Virgenes, 6, 343-356, 1992
 A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929 cells
 A:Reference number: A48551; MUID:93118243; PMID:1362024
 A:Accession: A48551
 A:Molecule type: mRNA
 A:Residues: 1-217, 'K', 219-264 <YOS>
 A:Cross-references: GB:A8001468; NID:g1888342; PIDN:BAA19253.1; PID:g1888343
 A:Experimental source: brain

A>Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:P121621)
 R:Hope, J.; Reekie, L.J.D.; Hunter, N.; Multhaup, G.; Beyreuther, K.; White, H.; Scott, Nature 336, 390-392, 1988
 A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
 A:Reference number: S07347; MUID:89057122; PMID:2904126
 A:Accession: S07347
 A:Molecule type: protein
 A:Residues: 25-36 <HOP>
 R:Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J. Infect. Dis. 167, 602-613, 1993
 A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
 A:Reference number: I46931; MUID:93179783; PMID:8440932
 A:Accession: I46931
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-264 <PRU>
 A:Cross-references: GB:S55629; NID:g266111; PIDN:AA825514.1; PID:g266112
 C:Genetics:
 A:Gene: PrP
 C:Superfamily: major prion protein
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F:1-24/Domain: signal sequence #status predicted <SIG>
 F:25-264/Product: major prion protein 1 #status predicted <MAT>
 F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
 F:190-225/Disulfide bonds: #status predicted
 F:192,208/Binding site: carbohydrate (Asn) (covalent) #status predicted
 Query Match 98.1%; Score 101; DB 2; Length 264;
 Best Local Similarity 90.0%; Pred. No. 5.3e-09; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;
 QY 1 ETDVKMERVVEQMCVTQYQ 20
 DB 211 ETDIKMERVVEQMCITQYQ 230
 RESULT 7
 prion protein - greater kudu
 C:Species: Tragalaphus strepsiceros (greater kudu)
 C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S37137
 R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A:Reference number: S37137
 A:Accession: S37137
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-264 <MAR>
 A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g3989
 C:Superfamily: major prion protein
 Query Match 98.1%; Score 101; DB 2; Length 264;
 Best Local Similarity 90.0%; Pred. No. 5.3e-09; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;
 QY 1 ETDVKMERVVEQMCVTQYQ 20
 DB 211 ETDIKMERVVEQMCITQYQ 230
 RESULT 8
 S71041
 major prion protein - black-handed spider monkey (fragment)
 C:Species: Ateles geoffroyi (black-handed spider monkey)
 C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71041; S53630
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA
 A:Residues: 1-232 <SCH>

A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:g474376; PIDN:AAC50097.1; PID:g474
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53630
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-194,'R',196-231 <SCW>
 A:Cross-references: EMBL:U08309
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie
 Query Match 96.1%; Score 99; DB 2; Length 232;
 Best Local Similarity 90.0%; Pred. No. 1e-08; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;
 QY 1 ETDVKMERVVEQMCVTQYQ 20
 DB 184 ETDVKMERVVEQMCITQYQ 203
 RESULT 9
 S71048
 major prion protein - Callicebus moloch (fragment)
 C:Species: Callicebus moloch
 C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71048; S53632
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71048
 A:Molecule type: DNA
 A:Residues: 1-241 <SCH>
 A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g47585; PIDN:AAC50100.1; PID:g475
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53632
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-203,'R',205-240 <SCW>
 A:Cross-references: EMBL:U08312
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie
 Query Match 96.1%; Score 99; DB 2; Length 241;
 Best Local Similarity 90.0%; Pred. No. 1e-08; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;
 QY 1 ETDVKMERVVEQMCVTQYQ 20
 DB 193 ETDVKMERVVEQMCITQYQ 212
 RESULT 10
 S71056
 major prion protein - mandrill (fragment)
 C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
 C:Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71056; S53621
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71056
 A:Molecule type: DNA
 A:Residues: 1-241 <SCH>
 A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g474
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-203,'R',205-240 <SCW>
 A/Cross-references: EMBL:U08303
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 241;
 Best Local Similarity 90.0%; Pred. No. 1e-08; Mismatches 0; Indels 0; Gaps 0;
 Matches 18; Conservative 2;

QY 1 ETDVKMERVVEQMCVTQYQ 20
 |||||
 DB 193 ETDVKMERVVEQMCITQYE 212

RESULT 11

S1045

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Accession: S71045; S53628

R/Schatz1, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; PIDN:AA050081.1; PID:g4743

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10,'L',12-202,'R',204-239 <SCW>

A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 245;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08; Mismatches 0; Indels 0; Gaps 0;
 Matches 18; Conservative 2;

QY 1 ETDVKMERVVEQMCVTQYQ 20
 |||||
 DB 192 ETDVKMERVVEQMCITQYE 211

RESULT 12

I61848

major prion protein precursor - common squirrel monkey

C/Species: Samitri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: I61848

R/CervenaKova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: I36907; MUID:95083661; PMID:7991600

A/Accession: I61848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:g595852; PIDN:AAA68636.1; PID:g5958

C/Superfamily: major prion protein

Query Match 96.1%; Score 99; DB 2; Length 252;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08; Mismatches 0; Indels 0; Gaps 0;
 Matches 18; Conservative 2;

QY 1 ETDVKMERVVEQMCVTQYQ 20

DB 199 ETDVKMERVVEQMCITQYE 218
 |||||

RESULT 13

UJHU

major prion protein precursor - human

N/Alternate names: I1K amyloid protein, 27-30K sialoglycoprotein; PrP 27-30; PrP 33-35C;

C/Species: Homo sapiens (man)

C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C/Accession: A24173; A40372; A05017; S14078; I54322; I58135; I59184; I79633; I79

R/Kretschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; Dar

DNA 5, 315-324, 1986

A/Title: Molecular cloning of a human prion protein cDNA.

A/Reference number: A24173; MUID:86300093; PMID:3755672

A/Accession: A24173

A/Molecule type: mRNA

A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g19046

R/Fuckett, C.; Concannon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 320-329, 1991

A/Title: Genomic structure of the human prion protein gene.

A/Reference number: A40372; MUID:91328137; PMID:1678248

A/Accession: A40372

A/Status: not compared with conceptual translation

A/Molecule type: DNA

A/Residues: 1-80,89-253 <PUC>

A/Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847

A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not

R/Liao, Y.C.-J.; Labo, R.V.; Clawson, G.A.; Smuckler, E.A.

Science 233, 364-367, 1986

A/Reference number: A05017; MUID:86261778; PMID:3014653

A/Accession: A05017

A/Molecule type: mRNA

A/Residues: 8-117,119-253 <LIA>

A/Cross-references: GB:D00015; NID:g220015; PIDN:BAA00011.1; PID:g220016; GB:M13667; NI

R/Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlo

EMBO J. 10, 513-519, 1991

A/Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) i

A/Reference number: S14078; MUID:91160504; PMID:1672107

A/Accession: S14078

A/Molecule type: protein

A/Residues: 58-72,'X',74-76,'XX',79,'XXX',83-86,111-128,'V',130-150 <TAG>

R/Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.

Hum. Mol. Genet. 1, 443-444, 1992

A/Title: Deletion in the prion protein gene in a demented patient.

A/Reference number: I54322; MUID:93250789; PMID:1363802

A/Accession: I54322

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 9-83,92-240 <RES>

A/Cross-references: GB:M81529; NID:g190517; PIDN:AA859442.1; PID:g190518

A/Accession: I68597

A/Status: translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 8-240 <RE3>

A/Cross-references: GB:M81930; NID:g190519; PIDN:AA859443.1; PID:g190520

R/Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;

Neurology 42, 422-427, 1992

A/Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutat

A/Reference number: I58135; MUID:92140671; PMID:1736177

A/Accession: I58135

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 51-91,'PHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGG' <RE2>

A/Cross-references: GB:S80539; NID:g244698; PIDN:AA821334.1; PID:g244699

R/Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldgaber, D.; Swergold, G.D.; Walle, P.R.

Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991

A/Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven,

A/Reference number: I59184; MUID:92073400; PMID:1683708

A/Accession: I59184

A/Status: translated from GB/EMBL/DBJ

A/Molecule type: DNA

A;Residues: 60-67 <GOL>
 A;Cross-references: GB:S71208; NID:G239877; PIDN:AA20521.1; PID:G239878; GB:S71210; NID
 C;Genetics:
 A;Gene: GDB:PRNP; CJD; PRIP
 A;Cross-references: GDB:I20720; OMIM:176640; OMIM:137440
 A;Map position: 20pter-20p12
 A;Introns: #status absent
 A;Note: one intron occurs before the initiator codon
 C;Superfamily: major prion protein
 C;Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
 F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-230/Product: major prion protein #status predicted <MAT>
 F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
 F:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F:179-214/Disulfide bonds: #status predicted
 F:181,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 96.1%; Score 99; DB 1; Length 253;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
 |||||
 DB 200 ETDVKMMERVVEQMCITQYE 219

RESULT 14

I84423

major prion protein precursor - rhesus macaque
 C;Species: Macaca mulatta (rhesus macaque)
 C;Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004
 C;Accession: I84423; S53622; S71054
 R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 R;Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Rubenstein, R.; D
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A;Title: Infectious amyloid precursor gene sequences in primates used for experimental b
 A;Reference number: I36907; MUID:95083661; PMID:7991600
 A;Accession: I84423
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 1-253 <RES>
 A;Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AAA68635.1; PID:G5958
 R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A;Title: Prion protein gene variation among primates.
 A;Reference number: S53614; MUID:95139066; PMID:7837269
 A;Accession: S53622
 A;Status: nucleic acid sequence not shown

A;Molecule type: DNA
 A;Residues: 1-210,'R',212-253 <SCH>
 A;Cross-references: EMBL:U08307

R;Schatzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A;Reference number: S71041

A;Molecule type: DNA
 A;Residues: 1-253 <SCW>
 A;Cross-references: EMBL:U08307; NID:G474372; PIDN:AA50095.1; PID:G474373
 C;Superfamily: major prion protein
 C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 253;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
 |||||
 DB 200 ETDVKMMERVVEQMCITQYE 219

RESULT 15

S71055

major prion protein - pig-tailed macaque
 C;Species: Macaca nemestrina (pig-tailed macaque)
 C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C;Accession: S71055; S53626
 R;Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A;Reference number: S71041
 A;Accession: S71055
 A;Molecule type: DNA
 A;Residues: 1-253 <SCH>
 A;Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AA50094.1; PID:G474
 R;Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A;Title: Prion protein gene variation among primates.
 A;Reference number: S53614; MUID:95139066; PMID:7837269
 A;Accession: S53626
 A;Status: nucleic acid sequence not shown
 A;Molecule type: DNA
 A;Residues: 8-210,'R',212-247 <SCW>
 A;Cross-references: EMBL:U08306
 C;Superfamily: major prion protein
 C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 253;
 Best Local Similarity 90.0%; Pred. No. 1.1e-08; Indels 0; Gaps 0;
 Matches 18; Conservative 2; Mismatches 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
 |||||
 DB 200 ETDVKMMERVVEQMCITQYE 219

Search completed: October 26, 2004, 15:44:44
 Job time : 12.6667 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 26, 2004, 15:34:24 ; Search time 47.9167 Seconds
(without alignments)
240.156 Million cell updates/sec

Title: US-09-603-832-7

Perfect score: 103

Sequence: 1 ETDVNMERVVEQMCVTQYQ 20

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt_02.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	240	2	Q8VHV4 microtus ag
2	103	100.0	248	2	Q8VHV5 clethrionom
3	103	100.0	253	2	Q9Z0T5 meriones un
4	103	100.0	254	1	Q9Z0T5 meriones un
5	103	100.0	254	1	PRIO_CRIGR
6	103	100.0	254	1	PRIO_CRIMI
7	103	100.0	254	1	PRIO_MOUSE
8	103	100.0	254	1	PRIO_RAT
9	103	100.0	254	1	PRIO_SIGHI
10	103	100.0	254	2	Q9Z0T4
11	103	100.0	254	2	Q9Z0T9
12	103	100.0	254	2	Q8VHV6
13	102	99.0	202	2	RAD19993
14	102	99.0	220	2	Q8VHV5
15	102	99.0	238	1	PRIO_THEGE
16	102	99.0	248	2	Q866V6
17	102	99.0	255	1	PRIO_CAMDR
18	101	98.1	200	2	Q97912
19	101	98.1	204	2	Q97629
20	101	98.1	204	2	Q9TSI7
21	101	98.1	204	2	Q9TSI8
22	101	98.1	211	2	Q77787
23	101	98.1	211	2	Q6J6V2
24	101	98.1	211	2	AAT09128
25	101	98.1	212	2	Q97698
26	101	98.1	215	2	Q97904
27	101	98.1	215	2	Q811W3
28	101	98.1	216	2	Q9TV00
29	101	98.1	220	2	Q02825
30	101	98.1	220	2	Q7JJ72
31	101	98.1	224	2	Q811W4 spalax leuc

32	101	98.1	226	2	Q97907
33	101	98.1	235	2	Q97695
34	101	98.1	245	2	Q9MZU7
35	101	98.1	250	2	Q866V4
36	101	98.1	251	2	Q866V4
37	101	98.1	255	1	PRIO_CANFA
38	101	98.1	256	1	PRIO_CEREL
39	101	98.1	256	1	PRIO_ODOHE
40	101	98.1	256	1	PRP2_BOVIN
41	101	98.1	256	1	PRP2_TRAST
42	101	98.1	256	2	O02841
43	101	98.1	256	2	O62670
44	101	98.1	256	2	Q6UWU7
45	101	98.1	256	2	Q6UWU8

ALIGNMENTS

RESULT 1

Q8VHV4 PRELIMINARY; PRT; 240 AA.
ID Q8VHV4
AC Q8VHV4:01-MAR-2002 (Tremblrel. 20, Created)
DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
ON [1]
NCBI_TaxID=29092;

SEQUENCE FROM N.A.

RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Garido G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -I- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL5732.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 240
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCM4EDD3F5F76693 CRC64;

Query Match 100.08; Score 103; DB 2; Length 240;

Best Local Similarity 100.08; Pred No. 1.8e-08; Mismatches 0; Indels 0; Gaps 0;

Matches 20; Conservative 0;

QY 1 ETDVNMERVVEQMCVTQYQ 20

DB 192 ETDVNMERVVEQMCVTQYQ 211

RESULT 2

Q8VHV5 PRELIMINARY; PRT; 248 AA.
ID Q8VHV5
AC Q8VHV5:01-MAR-2002 (Tremblrel. 20, Created)
DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Clethrionomys glareolus (Bank vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;

```

OX NCBI_TaxID=51090;
RP SEQUENCE FROM N.A.
RA Dell'Ono G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF167624; RAL57231.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR PRINTS; PF03991; Prion.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 248 248
SQ SEQUENCE 248 AA; 27259 MW; 815E648CD2773C2C CRC64;

Query Match 100.0%; Score 103; DB 2; Length 248;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20
DB 200 ETDVKMERVVQMCVTQYQ 219

RESULT 3
Q920T5 PRELIMINARY; PRT; 253 AA.
AC Q920T5
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
OC Meriones.
OX NCBI_TaxID=10047;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=9301687; PubMed=10373359;
RA Wopfinger F., Weidner G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Scharl H.M.;
RT Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.;
RL J. Mol. Biol. 249:1163-1178 (1999).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF171314; RAD1985.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR PRINTS; PF03991; Prion.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 253 253
SQ SEQUENCE 253 AA; 27747 MW; B44D16867A97307F CRC64;

Query Match 100.0%; Score 103; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20
DB 199 ETDVKMERVVQMCVTQYQ 218

Clethrionomys.
[1]
RP SEQUENCE FROM N.A.
RA Dell'Ono G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF167624; RAL57231.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR PRINTS; PF03991; Prion.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 248 248
SQ SEQUENCE 248 AA; 27259 MW; 815E648CD2773C2C CRC64;

Query Match 100.0%; Score 103; DB 2; Length 248;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVQMCVTQYQ 20
DB 200 ETDVKMERVVQMCVTQYQ 219

RESULT 4
ID NCBI_CRIGR STANDARD; PRT; 254 AA.
AC Q60506;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cricetus griseus (Chinese hamster).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Cricetus.
OX NCBI_TaxID=10029;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=90158578; PubMed=2406562;
RA Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
RA LeMay S.J., Prusiner S.B.;
RT "Three hamster species with different scrapie incubation times and
RT neuropathological features encode distinct prion proteins.";
RL Mol. Cell. Biol. 10:1153-1163 (1990).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC -1- host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases Kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its contents in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (see http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; M33958; AAA37013.1; -.
CC PIR; A34759; A34759.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 6.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT CHAIN 1 22 By similarity.
FT PROPEP 23 231 Major prion protein.
FT LIPID 232 254 Removed in mature form.
FT DOMAIN 231 231 GPI-anchor amidated serine.
FT CARBOHYD 90 231 PRP27-30 (PROTEASE RESISTANT CORE).
FT CARBOHYD 181 181 N-linked (GlcNAc...) (By similarity).
FT DISULFID 197 197 N-linked (GlcNAc...) (By similarity).
FT DOMAIN 179 214 By similarity.
FT REPEAT 51 91 5 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 51 59 Q.
FT REPEAT 67 67 2.
FT REPEAT 75 75 3.
FT REPEAT 83 83 4.
FT REPEAT 84 91 5.
SQ SEQUENCE 254 AA; 27823 MW; 6299CA00EB8607D CRC64;

Query Match 100.0%; Score 103; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;

```

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 ETDVKMERVVEQMCVTQYQ 20
Db 200 ETDVKMERVVEQMCVTQYQ 219

RESULT 5

PRIOR CRIMI
ID AC Q60468; STANDARD; PRT; 254 AA.
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cricetulus migratorius (Armenian hamster).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Cricetulus.
OX NCBI_TaxID=10032;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Brain;
RC MEDLINE=90158578; PubMed=2406562;
RA Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
RT Dearmond S.J., Prusiner S.B.;
RT "Three hamster species with different scrapie incubation times and
neuropathological features encode distinct prion proteins.";
RL Mol. Cell. Biol. 10:1153-1163(1990).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
"rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
animals infected with the degenerative neurological diseases kuru,
Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
(GSS), scrapie, bovine spongiform encephalopathy (BSE),
transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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or send an email to license@isb-sib.ch)
CC
CC -----
DR EMBL; M33959; AAA37014.1; --
DR HSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1
DR Pfam; PF03891; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 231 By similarity.
FT PROPEP 232 254 Major prion protein.
FT LIPID 231 231 Removed in mature form.
FT DOMAIN 90 231 GPI-anchor amidated serine.
FT CARBOHYD 181 181 PRP27-30 (PROTEASE RESISTANT CORE).
FT CARBOHYD 197 197 N-linked (GLCNAc...) (By similarity).
FT DISULFID 179 214 N-linked (GLCNAc...) (By similarity).
FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 51 59 Q.
FT REPEAT 60 67 1.
FT REPEAT 68 75 2.
FT REPEAT 76 83 3.
FT REPEAT 76 83 4.

FT REPEAT 84 91 5.
SQ SEQUENCE 254 AA; 27855 MW; 7B963FC6F77F9D0F CRC64;
Query Match 100.0%; Score 103; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 ETDVKMERVVEQMCVTQYQ 20
Db 200 ETDVKMERVVEQMCVTQYQ 219

RESULT 6

PRIOR MOUSE
ID AC P04925; STANDARD; PRT; 254 AA.
DT 13-AUG-1987 (Rel. 05, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DT 01-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PrP; Synonyms=Prn-P;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=NZW, and 1/LNJ;
RX MEDLINE=88052869; PubMed=2890436;
RA Westaway D., Goodman P.A., Miranda C.A., McKinley M.P., Carlson G.A.,
RT Prusiner S.B.;
RT "Distinct prion proteins in short and long scrapie incubation period
mice.";
RL Cell 51:651-662(1987).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=86313583; PubMed=3462700;
RA Loch C., Cheesbro B., Race R., Keith J.M.;
RT "Molecular cloning and complete sequence of prion protein cDNA from
mouse brain infected with the scrapie agent.";
RL Proc. Natl. Acad. Sci. U.S.A. 83:6372-6376(1986).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=88166695; PubMed=2894984;
RA Hope J., Multhaup G., Reekie L.J.D., Kimberlin R.H., Beyreuther K.;
RT "Molecular pathology of scrapie-associated fibril protein (PrP) in
mouse brain affected by the ME7 strain of scrapie.";
RL Eur. J. Biochem. 172:271-277(1988).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=NZW; TISSUE=Brain;
RX MEDLINE=99018115; PubMed=9799790;
RA Lee I.Y., Westaway D., Smit A.P.A., Wang K., Seto J., Chen L.,
RA Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Prusiner S.B.,
RA Hood L.E.;
RT "Complete genomic sequence and analysis of the prion protein gene
region from three mammalian species.";
RL Genome Res. 8:1022-1037(1998).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=23388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Kraussberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenn C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heieh F.,
RA Skatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Skatchenko M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.W.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Maira W.A.,
 RT "Generation and initial analysis of more than 15,000 full-length human
 and mouse cDNA sequences.",
 Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [6]
 RN SEQUENCE OF 87-164 FROM N.A.
 RP MEDLINE=85213844; PubMed=3923361;
 RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,
 RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.;
 RT "Identification of scrapie prion protein-specific mRNA in scrapie-
 RT infected and uninfected brain.",
 Nature 315:331-333(1985).
 RN [7]
 RN NATURE 315:331-333(1985).
 RN STRUCTURE BY NMR OF 120-230.
 RP MEDLINE=96317593; PubMed=8700211;
 RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,
 RA Wuthrich K.;
 RT "NMR structure of the mouse prion protein domain PrP(121-321).";
 Nature 382:180-182(1996).
 RN [8]
 RN STRUCTURE BY NMR OF 23-231.
 RP MEDLINE=97424376; PubMed=9280298;
 RA Riek R., Hornemann S., Wider G., Glockshuber R., Wuthrich K.;
 RT "NMR characterization of the full-length recombinant murine prion
 RT protein, mPrP(23-231).";
 FEBS Lett. 413:282-288(1997).
 RN [9]
 RN HYDROXYLATION OF PRO-44.
 RP MEDLINE=20490364; PubMed=11032800;
 RA Gill A.C., Ritchie M.A.O., Hunt L.G., Steane S.E., Davies K.G.,
 RA Bocking S.P., Rhis A.G.O., Bennett A.D., Hope U.;
 RT "Post-translational hydroxylation at the N-terminus of the prion
 RT protein reveals presence of Pfl structure in vivo.";
 EMBO J. 19:5324-5331(2000).
 CC -!- FUNCTION: the function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "folds".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL: M18070; AAA39997.1; -;
 DR EMBL: M18071; AAA39998.1; -;
 DR EMBL: M13685; AAA39996.1; -;
 DR EMBL: U29186; AAC02804.1; -;
 DR EMBL: BC006703; AAH06703.1; -;
 DR EMBL: M30384; AAA39999.1; -;
 DR PIR: A29669; A23544.
 DR PDB: 1AG3; NMR; @=123-225.
 DR MGB: MGI-97769; Prnp
 DR GO: GO:0005783; C:Endoplasmic reticulum; IDA.
 DR GO: GO:0005794; C:Golgi apparatus; IDA.
 DR GO: GO:004321; C:Lipid raft; IDA.
 DR GO: GO:0005507; F:copper ion binding; IDA.
 DR GO: GO:0006979; P:response to oxidative stress; IDA.
 DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW 3D-structure; Glycoprotein; GPI-anchor; Hydroxylation; Lipoprotein;
 KW Polymorphism; Prion; Repeat; Signal.
 FT SIGNAL 1 22
 FT CHAIN 23 230 Major prion protein.
 FT PROPEP 231 254 Removed in mature form (By similarity).
 FT MOD_RES 44 44 Hydroxyproline.
 FT LIPID 230 230 GPI-anchor amidated serine (By
 similarity).
 FT CARBOHYD 180 180 N-linked (GlcNAc...) (Probable).
 FT CARBOHYD 196 196 N-linked (GlcNAc...) (Probable).
 FT DISULFID 178 213 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT DOMAIN 51 90 Q.
 FT REPEAT 51 58 1.
 FT REPEAT 59 66 2.
 FT REPEAT 67 74 3.
 FT REPEAT 75 82 4.
 FT REPEAT 83 90 5.
 FT VARIANT 108 108 L -> F (linked to long incubation time).
 FT VARIANT 189 189 T -> V (linked to long incubation time).
 FT CONFLICT 133 133 M -> V (in Ref. 2 and 6).
 FT TURN 124 126
 FT STRAND 128 129
 FT HELIX 143 152
 FT TURN 153 155
 FT STRAND 161 162
 FT HELIX 171 191
 FT TURN 192 194
 FT HELIX 199 221
 FT TURN 222 224
 SQ SEQUENCE 254 AA; 27977 MW; D5331B6321826CC0 CRC64;
 Query Match 100.0%; Score 103; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.9e-08;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVNMERVVEQMCVTQYQ 20
 Db 199 ETDVNMERVVEQMCVTQIQ 218
 RESULT 7
 PRIO RAT
 ID PRIO RAT STANDARD; PRT; 254 AA.
 AC F13852;
 DT 01-JAN-1990 (Rel. 13, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP).
 GN Name=Prnp; Synonyms=Prn;
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RN SEQUENCE FROM N.A.
 RC STRAIN=Zitter, and SJ/D; TISSUE=Liver;
 RX MEDLINE=94232539; PubMed=7909925;
 RA Gomi H., Ikeda T., Kunieda T., Itohara S., Prusiner S.B.,
 RA Yamanouchi K.;
 RT "Prion protein (PrP) is not involved in the pathogenesis of spongiform
 RT encephalopathy in zitter rats.",
 RL Neurosci. Lett. 166:171-174(1994).
 RN [2]
 RN SEQUENCE FROM N.A.
 RC STRAIN=Wistar; TISSUE=Liver;
 RX MEDLINE=97033369; PubMed=8879116;
 RA Saeki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;

RT "Three-exon structure of the gene encoding the rat prion protein and
 RL its expression in tissues.";
 RL Virus Genes 12:15-20(1996).
 RN [3]
 RP SEQUENCE OF 29-254 FROM N.A.
 RX MEDLINE=88037055; PubMed=2889848;
 RA Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button J.D.,
 RA Clawson G.A.;
 RA "Cloning of rat 'prion-related protein' cDNA";
 RL Lab. Invest. 57:370-374(1987).
 CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; S69654; AAB30728.2; -;
 DR EMBL; D50093; BAA08790.1; -;
 DR EMBL; M20113; AAA41947.1; -;
 DR PIR; A53892; A53892.
 DR HSSP; P04925; IAG2.
 DR RGD; 3410; Prnp.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION 1; 1.
 DR PROSITE; PS00706; PRION 2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 28 Potential.
 FT CHAIN 29 231 Major prion protein.
 FT PROPEP 232 254 Removed in mature form (By similarity).
 FT LIPID 231 231 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Probable).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Probable).
 FT DISULFID 179 214 By similarity.
 FT DOMAIN 51 91 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 51 59 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT REPEAT 76 83 4.
 FT REPEAT 84 91 5.
 SQ SEQUENCE 254 AA; 27804 MW; 28F424D13BBFA2C6 CRC64;
 Query Match 100.0%; Score 103; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.9e-08;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVKMMRVVEQMCVTQYQ 20
 DB 200 ETDVKMMRVVEQMCVTQYQ 219
 RESULT 8
 PRT: 254 AA.
 ID -PRT SIGHI PRT: 254 AA.
 AC Q920T3;

DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 03-JUL-2004 (Rel. 44, Last annotation update)
 DN Major prion protein precursor (PrP).
 GN Name=PRNP; Synonyms=PRP;
 OS Sigmmodon hispidus (Hispid cotton rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
 OC Sigmmodon.
 OC NCBI_TaxID=42415;
 OX [1]
 RN SEQUENCE FROM N.A.
 RP TISSUE=Brain;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 RT of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; AF117325; AAD19996.1; -;
 DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION 1; 1.
 DR PROSITE; PS00706; PRION 2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 FT SIGNAL 1 22 By similarity.
 FT CHAIN 23 231 Major prion protein.
 FT PROPEP 232 254 Removed in mature form (By similarity).
 FT DOMAIN 51 91 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 51 59 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT REPEAT 76 83 4.
 FT REPEAT 84 91 5.
 FT DISULFID 179 214 By similarity.
 FT LIPID 231 231 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 SQ SEQUENCE 254 AA; 27874 MW; 50C464D516E572DF CRC64;
 Query Match 100.0%; Score 103; DB 1; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.9e-08;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ETDVKMMRVVEQMCVTQYQ 20
 DB 200 ETDVKMMRVVEQMCVTQYQ 219

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RA Heinrich C., Karunaratne A., Pasternak S.H., Chishti M.A., Liang Y.,
RA Mastrangelo P., Wang K., Smit A.F.A., Katamine S., Carlson G.A.,
RA Cohen F.E., Prusiner S.B., Melton D.W., Tremblay P., Hood L.E.,
RA Westaway D.;
RT "Ataxia in prion protein (PrP)-deficient mice is associated with
RT upregulation of the novel PrP-like protein doppel.";
RL J. Mol. Biol. 292:797-817(1999).
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; U29187; RAD41440.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion.Octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 254 AA; 28010 MW; DF90D0CE586CC0 CRC64;

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
DB 199 ETDVKMMERVVEQMCVTQYQ 218

RESULT 11
Q8VHV6 PRELIMINARY; PRT; 254 AA.
AC Q8VHV6
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DE 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Apodemus sylvaticus (European woodmouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
OC Apodemus.
OX NCBI_TaxID=10129;
RN [1]_
RP SEQUENCE FROM N.A.
RA Del'Amo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Cardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367623; AAL57230.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion.Octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 254 AA; 27857 MW; CB2E5658C47A8895 CRC64;

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20
DB 200 ETDVKMMERVVEQMCVTQYQ 219

RESULT 12
AAD19993 PRELIMINARY; PRT; 254 AA.
ID AAD19993

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AC AAD19993;
DT 02-MAR-2004 (TRENBLrel. 27, Created)
DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
DE 02-MAR-2004 (TRENBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: AF117322; AAD19993.1;
FT NON TER 254 254
SQ SEQUENCE 254 AA; 27804 MW; 28F424D13BEFA2C6 CRC64;

Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.9e-08;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMVERVVEQMCVTQYQ 20
DB 200 ETDVKMVERVVEQMCVTQYQ 219

RESULT 13
O97696
AC O97696 PRELIMINARY; PRT; 202 AA.
DT 01-MAY-1999 (TRENBLrel. 10, Created)
DT 01-MAY-1999 (TRENBLrel. 10, Last sequence update)
DE 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Lama glama (Llama).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.
OX NCBI_TaxID=9844;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.; PrPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AF113943; AAD13291.1;
DR InterPro: IPR000817; Prion.
DR Pfam: PF03991; Prion; 1.
DR SMART: SM00157; PrP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion.
FT NON TER 202 202
SQ SEQUENCE 202 AA; 21860 MW; FC45232DB773F354 CRC64;

Query Match 99.0%; Score 102; DB 2; Length 202;
Best Local Similarity 95.0%; Pred. No. 2.2e-08;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMVERVVEQMCVTQYQ 20
DB 163 ETDVKMVERVVEQMCVTQYQ 182

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RESULT 14
Q866W7
ID Q866W7 PRELIMINARY; PRT; 220 AA.
AC Q866W7;
DT 01-JUN-2003 (TRENBLrel. 24, Created)
DT 01-JUN-2003 (TRENBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TRENBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Ochotona princeps (Southern American pika).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Lagomorpha; Ochotonidae; Ochotona.
OX NCBI_TaxID=9978;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22408137; PubMed=12519913;
RA van Rheede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
RL Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133036; AAN16490.1;
DR InterPro: IPR000817; Prion.
DR Pfam: PF03991; Prion Octapep; 5.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PrP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion.
FT NON TER 220 220
SQ SEQUENCE 220 AA; 23872 MW; 5318CF0BE39FB669 CRC64;

Query Match 99.0%; Score 102; DB 2; Length 220;
Best Local Similarity 95.0%; Pred. No. 2.4e-08;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMVERVVEQMCVTQYQ 20
DB 175 ETDVKMVERVVEQMCVTQYQ 194

RESULT 15
PRIO_THEGE
ID PRIO_THEGE STANDARD; PRT; 238 AA.
AC Q85270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrP; Synonyms=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.

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CC  -!- SIMILARITY: Belongs to the prion family.
CC -----
CC  This SWISS-PROT entry is copyright. It is produced through a collaboration
CC  between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC  the European Bioinformatics Institute. There are no restrictions on its
CC  use by non-profit institutions as long as its content is in no way
CC  modified and this statement is not removed. Usage by and for commercial
CC  entities requires a license agreement (see http://www.isb-sib.ch/announce/
CC  or send an email to license@isb-sib.ch).
CC -----
DR  EMBL; U75383; AAB50630.1; -.
DR  HSSP; P23907; IG04.
DR  InterPro: IPR000817; Prion.
DR  Pfam; PF00377; Prion; 1.
DR  Pfam; PF03991; Prion.Octapep; 5.
DR  PRINTS; PR00341; PRION.
DR  PROSITE; PS00291; PRION 1; 1.
DR  PROSITE; PS00706; PRION 2; 1.
KW  Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW  Signal.
FT  SIGNAL          1      15      By similarity.
FT  NON_TER        <1     15      Major prion protein.
FT  CHAIN           16     215     Removed in mature form (By similarity).
FT  PROPEP         216    >238     By similarity.
FT  DISULFID       164     199     GPI-anchor amidated serine (By
FT  LIPID          215     215     similarity).
FT  CARBOHYD       166     166     N-linked (GlcNAc..)(Potential).
FT  CARBOHYD       182     182     N-linked (GlcNAc..)(Potential).
FT  DOMAIN         44      83      4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT  REPEAT         44      52      Q.
FT  REPEAT         53      60      1.
FT  REPEAT         61      68      2.
FT  REPEAT         69      76      3.
FT  REPEAT         76      84      4.
FT  NON_TER       238     238
SQ  SEQUENCE       238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match          99.0%; Score 102; DB 1; Length 238;
Best Local Similarity 95.0%; Pred. No. 2.6e-08;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY  1  ETDVKMMRWVQMCVTQYQ 20
Db  185  ETDVKMMRWVQMCVTQYQ 204

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Search completed: October 26, 2004, 15:44:11
 Job time : 48.9167 secs